				Г	DEPARTMEN	T OF N	<b>OF UTAH</b> ATURAL RE , GAS AND				AME	NDED RE	FORM 3	•
		IT TO DRII	LL			1	1. WELL NAME and		<b>ER</b> 63-7-31					
2. TYPE O		ILL NEW WELL (iii)	REENTER P&	A WELL	. DEE	PEN WEL	10		3	B. FIELD OR WILD		IGNATED	,	
4. TYPE O										5. UNIT or COMMU				IT NAME
6. NAME C	F OPERATOR	Gas We			nane Well: NO				-	GILSONITE DRAW  7. OPERATOR PHONE				
8. ADDRE	SS OF OPERATO	VANTAGE ENERGY UINTA LLC						303 386-8600 9. OPERATOR E-MAIL						
		116 Inverness	Drive East, Ste		-		<u> </u>			john.moran@vantageenergy.com				
	RAL LEASE NUN , INDIAN, OR S			11. MINERAL OWNERSHIP  FEDERAL ( INDIAN  STATE  FEE  FEE  FEE					12. SURFACE OWNERSHIP  FEDERAL INDIAN STATE FEE				FEE 💮	
13. NAME		WNER (if box 12	= 'fee')				-		1	14. SURFACE OWN	ER PHO	ONE (if b	ox 12 =	'fee')
15. ADDR	ESS OF SURFAC	CE OWNER (if box	12 = 'fee')						1	16. SURFAC <mark>E OWN</mark>	ER E-M	AIL (if b	ox 12 =	'fee')
17. INDIA	N ALLOTTEE O	R TRIBE NAME			ITEND TO CO		LE PRODUC	TION FROM	1	19. SLANT				
	= 'INDIAN')			YES (	IPLE FORMA Submit		ngling Applica	ntion) NO 📵		VERTICAL DI	RECTIO	NAL 📵	HORIZO	ONTAL 🛑
20. LOCA	TION OF WELL		FO	OTAGE	s	Q	TR-QTR	SECTION	V	TOWNSHIP	I	RANGE		IERIDIAN
LOCATIO	N AT SURFACE		2167 F	SL 562	2 FWL		NWSW	7		6.0 S		3.0 W		U
Top of U	permost Produ	ucing Zone	1980 F	SL 660	) FWL		NWSW	7		6.0 S 3.0 W U				U
At Total I	Depth		1980 F	SL 660	) FWL		NWSW	7		6.0 S		3.0 W		U
21. COUN		JCHESNE		22. DI	ISTANCE TO		ST LEASE LI	NE (Feet)	- [2	23. NUMBER OF AC		DRILLI 250	NG UNIT	•
					ISTANCE TO ied For Drilli	ng or Co		SAME POOL	-	26. PROPOSED DEI		TVD: 1	12115	
27. ELEVA	TION - GROUN	<b>ID LEVEL</b> 7094		28. BC	28. BOND NUMBER  LPM8907971					29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 49-1501				
				Н	Hole, Casing, and Cement Information				_					
String	Hole Size	Casing Size	Length	We	Weight Grade & Thread		Max Mud Wt.		Cement		Sacks	Yield	Weight	
Surf	12.25	9.625	0 - 1500	3	6.0	J- <b>5</b> 5	ST&C	0.0		Light (Hibor	nd)	216	2.9	11.0
										50/50 Poz	Z	205	1.61	14.2
Prod	7.875	4.5	0 - 12125	1	1.6	P-110	Other	8.6		Type V	_	543	3.82	11.0
										Class G		490	1.26	14.2
					•	ATTAC	HMENTS							
	VERIFY TH	E FOLLOWING	ARE ATTACH	ED IN	ACCORDA	NCE W	ITH THE U	JTAH OIL AN	ID G	AS CONSERVAT	ION G	ENERAL	. RULES	3
<b>⊯</b> WE	LL PLAT OR MA	AP PREPARED BY	LICENSED SUR	VEYOR	OR ENGINE	ER	<b>∠</b> coi	MPLETE DRILL	.ING I	PLAN				
AFF	IDAVIT OF STA	ATUS OF SURFACE	OWNER AGRE	EMENT	(IF FEE SUR	RFACE)	FOR	M 5. IF OPER	ATOR	IS OTHER THAN T	HE LEA	SE OWN	ER	
DRILLED)		RVEY PLAN (IF DI	RECTIONALLY	OR HO	RIZONTALLY	•	<b>№</b> ТОР	OGRAPHICAL	МАР					
NAME Da	vid F. Banko				TITLE Perm	it Agent			PHO	PHONE 303 820-4480				
SIGNATU	RE				<b>DATE</b> 03/2	5/2011			EM	AIL david@banko1.	com			
	<b>BER ASSIGNED</b> 135066000				APPROVAL				E	200 Egill				
									I	Permit Manager				

#### GDU 63-7-31

SHL: 2,167' FSL 562' FWL (NW/4 SW/4)
BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4) within a 60' radius
Sec. 7 T6S R3W
Duchesne County, Utah
Federal Lease: UTU78235

#### NINE POINT DRILLING PROGRAM

(All drilling procedures will comply with BLM Onshore Oil and Gas Orders 1 and 2)

# Vantage Energy Uinta LLC respectfully requests that all information regarding this well be kept CONFIDENTIAL.

This Application for Permit to Drill (APD) is being filed under the APD process as stated per Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents.

#### THIS APD ALSO SERVES AS THE NOTICE OF STAKING PER OSO #1.

This document was prepared using language and requirements consistent with those previously approved by BLM/USFS. This APD process has included the following:

- Consultation with the Surface Management Agency, United State Forest Service (USFS) to initiate the National Environmental Policy Act (NEPA) process for this specific wellsite along with other nearby proposed wellsites in September 8, 2008.
- Meeting with USFS at the wellsite on October 15, 2008, to review the topography, access and site specific surface use issues. Preliminary wellsite staking was initiated at this time.
- Authorization to conduct an archaeological survey was received from USFS on October 27, 2008. The archaeological survey was conducted shortly thereafter.
- Preliminary wellsite staking was completed on October 15, 2008. The wellsite was surveyed and staked at a location as preliminarily agreed to with USFS at 2,167' FSL 562' FWL (NW/4 SW/4) of Sec. 7 T6S R3W on November 6, 2008, by Uintah Engineering & Land Surveying (Uintah), surveyor, on a site that is geologically and topographically acceptable.
- A wellsite review and NEPA planning meeting was held at the USFS office in Vernal, Utah on January 22, 2009. Attending were USFS, BLM, Petros Environmental (NEPA Contractor) and Vantage.
- The survey plats were finalized after the January 22, 2009 meeting and are as attached.

We understand that an onsite meeting with USFS/BLM representatives, and Vantage will be scheduled, at which time the specific concerns of USFS/BLM and Vantage will be discussed. Best efforts have been made to address specific concerns of the USFS.

Please contact Mr. John Moran, Senior Drilling Engineer, with Vantage at 303-386-8600, or Mr. David Banko, Permit Agent at 303-820-4480 or at david@banko1.com if there are any questions or concerns regarding this Drilling Program.

#### a) GEOLOGIC MARKERS

Anticipated tops of geologic markers are indicated in Table 1

**Table 1 Estimated Tops of Geologic Markers** 

Formation	Vertical Depth	Measured Depth	Subsea Depth	Description
Green River	Surface	Surface	7,110'	Sandstone/siltstone/shale
Garden Gulch	3,380'	3,388'	3,730'	Sand and Siltstone
Douglas Creek	4,260'	4,270'	2,850'	Sandstone/siltstone/shale
Castle Peak	5,195'	5,205'	1,950'	Sandstone/siltstone/shale
Uteland Butte	5,660'	5,670'	1,450'	Carbonate/shale/sandstone
Wasatch	5,830'	5,840'	1,280'	Shale/Sandstone
Price River	9,910'	9,920'	-2,800'	Shale/Sandstone
Blue Castle	12,110'	12,120'	-5,000'	Sandstone
Total Depth	12,115'	12,125	-5,005'	TD +/- 5' into Blue Castle

Surface Elevation: 7,094' (Ungraded Ground); 7,109' (Est. KB).

Proposed Total Vertical Depth: 12,115' Proposed Total Measured Depth: 12,125

#### b) DEPTHS OF WATER AND MINERAL-BEARING ZONES

Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicated no permitted water wells within three miles of the proposed location. Utah Division of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

**Table 2: Principal Anticipated Water and Mineral-bearing Zones** 

Formation	Measured Depth	Subsea	Potential Contents
Green River	Surface	7,110'	Water
Garden Gulch	3,380'	3,730'	Oil/Gas
Douglas Creek	4,260'	2,850'	Oil/Gas
Castle Peak	5,195'	1,950'	Oil/Gas
Uteland Butte	5,660'	1,450'	Oil/Gas
Wasatch	5,830'	1,280'	Oil/Gas
Price River	9,910'	-2,800'	Oil/Gas
Blue Castle	12,110'	-5,000'	Oil/Gas
Total Depth	12,115'	-5,005'	Oil/Gas/Water

#### c) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

The maximum anticipated surface pressure for this well is calculated to be **2,992 psi**. Therefore, rules for a 3,000 psi rated BOP and choke manifold system are applicable. A diagram of the proposed 3,000 psi rated BOP stack configuration is shown in **Fig. 1**.

Ram type preventers and related pressure control equipment will be pressure tested to fated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. Please see variance request at end of program for this section.

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the USFS/BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22psi/ft or 1,500psi, whichever is greater, not to exceed 70% of internal yield. Please see variance request at end of program for this section.

Casing shoe will be tested by drilling out from below the shoe and testing to the maximum expected mud weight as discussed in the mud program specifications below. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

#### Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2 (OSO #2)* for 3,000 psi systems. Irregardless of the rig selected, the rig's accumulator system shall have sufficient capacity to close all BOPs and retain 200 psi above precharge. The proposed pressure control equipment will meet or exceed standards specified in the Order OSO #2.

#### d) CASING PROGRAM

Casing of quality equal to or better than that indicated in **Tables 3** and **4** will be used for this well. Actual casing used will be dependent on availability.

**Table 3 Proposed Casing Program** 

Tubic c Tropo.	oca Cabing 1 1 0g1 an	•	
Depth (MD)	Hole Diameter	<b>Casing Diameter</b>	Casing Weight and Grade
$0 - \pm 50$	24"	16"	Optional Conductor - Only if Required
0 – 1,500'	12-1/4"	9-5/8"	36# J-55 ST&C, API New Pipe
0 – 12,125	7-7/8"	4-1/2"	11.6# HCP-110 LT&C, API New Pipe

Table 4:	Proposed	Casing	<b>Specifications</b>	and Design	<b>Safety Factors</b>
I WOIC II	LIUPUUU	Cubiling	Opecialentions	unu Dongn	Duice, I accord

Size	Collapse (psi)	Burst (psi)	Body Strength (1,000 lbs.)	Joint Strength (1,000 lbs.)	Thread	*	*Safety Facto	
						Burst	Collapse	Tension
						Design	Design	Design
						(1.2)	(1.0)	(1.4)
16"			ructural and to air drilling sur		Weld	NA	NA	NA
9-5/8" 36# J-55	2,020	3,520	564	394	ST&C	1.42	6.27	4.17
4-1/2" 11.6# HCP-110	8,650	10,690	367	279	LT&C	1.25	1.51	1.63

<sup>\*</sup>Safety Factor Calculation Assumptions:

#### **Surface Casing:**

**Burst Load:** Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required easing test pressure.

#### **MASP**

```
Load = (Formation Gradient -0.22 \text{ psi/ft}) * Total Depth, TVD = (0.467 \text{ psi/ft} - 0.22 \text{ psi/ft}) * 12,115 \text{ ft}. = 2,992 \text{ psi}
```

#### TEST PRESSURE

```
Load = Greater of 1500 psig or 0.70*3520 = 2464 psig or MASP = 3,005 psig SF Burst = 3,520 psi / 2,992 psi = 1.18
```

**Collapse Load:** Assumes worse case loading of evacuated casing during cementing process.

Cement density = 12.2 ppg (wtd avg) Load = 12.2 ppg \* 0.052 \* 1500 ft = 952 psi SF Collapse = 2020 psi / 952 psi = 2.12

**Tension Load:** Assumes air weight at total depth + 100,000 lbs overpull design factor.

Load = (36 lbs/ft \* 1500 ft) + 100,000 lbs overpull = 154,000 lbs

SF Tension = 394,000 lbs / 154,000 lbs = 2.55

# Test Pressure = Production Casing

**Burst Load:** Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

```
Load = 10690 psi * 0.80
= 8552 psi
SF Burst = 10690 psi / 8552 psi = 1.25
```

**Collapse Load:** Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

```
Load = 0.433 psi/ft * 12,115 ft
= 5246 psi
SF Collapse = 8650 psi / 5246 psi = 1.65
```

**Tension Load:** Assumes buoyed weight of casing at total depth + 80,000 lbs overpull design factor.

```
Load = [11.6 lbs/ft * 12,115 ft TVD * ((65.5 – 10.0) / 65.5)] + 80,000 lbs
= 119,079 lbs + 80,000 lbs
= 199,078 lbs
```

SF Tension = 279,000 lbs / 199,078 lbs = 1.40

#### e) CEMENT PROGRAM

**Table 5: Proposed Cement Program** 

Table 5: Propos  Measured	Hole		Cement
		Casing	Cement
Depth	Diameter	Diameter	
$0' - \pm 50'$	24"	16"	Optional structural conductor if required: Grout with
			approximately 4 cubic yards of redi-mix back to
			surface (includes 100% excess)
			TOC: Surface (Top-off per visual observation)
0' - 1,500'	12-1/4"	9-5/8"	Lead System (1,000' – Surface)
			216 sks "Lite" slurry + ½ lb/sk celloflake.
			Density: 11.0 ppg
			Yield: 2.90 cuft/sk
			Water: 15.45 gal/sk
			Excess: 100%
			<b>Tail System (1,500' – 1,000') + 40' Shoe Joint</b>
			205 sks 50:50 (Class G: Poz) + 2% gel + 2% CaCl <sub>2</sub>
			Density: 14.2 ppg
			Yield: 1.61 cuft/sk
			Water: 5.75 gal/sk
			Excess: 100%
			2
			TOC: Surface (Top-off per visual observation)
0' - 12,125'	7-7/8"	4-1/2"	Lead System (9,500' – 2,500')
, -			543 sks Type "V" + 16% Gel + 10 lbs/sk gilsonite +
			3% Salt + ¼ lb/sk celloflake
			Density: 11.0 ppg
			Yield: 3.82 cuft/sk
			Water: 23.0 gal/sk
			*Excess: 30%
			Excess. 3070
			<b>Tail System (12,125' – 9,500') + 40' Shoe Joint</b>
			490 sks 50:50 (Class G:Poz) + 2% gel + 10% salt + ½
			lb/sk celloflake
			To, on Continue
			Density: 14.2 ppg
			Yield: 1.26 cuft/sk
			Water: 5.75 gal/sk
			*Excess: 30%
			"EXCESS: 50%

<sup>\*</sup>Note: The production hole cement volume will be determined by the caliper log, using caliper volume +15% excess factor.

#### f) MUD PROGRAM

The mud program for the proposed well is indicated in **Table 6.** 

**Table 6 Proposed Mud Program** 

Interval (feet)	Mud Weight (lbs/gallon)	Viscosity (secs/qt)	Fluid Loss (ccs/30 min)	Mud Type					
$0 - \pm 50$ '	NA	NA	NA	NA					
	Set optional 14" conductor with bucket rig								
50' - 1500'±	NA	NA	N/C	Air/Mist					
	Run/o	cement 9-5/8" surface	casing						
1500'± - TD			< 10	KCL Water / PHPA / DAP					
	Run Logs – Run/cement 4-1/2" production casing								

Surface Hole Comments: Spud with "spudder rig" and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. <u>Please see</u> variance requests for this section.

Production Hole Comments: Dump spud mud to reserve pit. Drill out surface casing with fresh water adding 6 ppb DAP (Diammonium Phosphate) for shale inhibition and corrosion control. Circulate the reserve pit and flocculate out drill solids. Use pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,600' "mud up" and "close in" the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and contain any well kicks. Monitoring equipment will be installed on site to detect changes in mud volume.

#### g) LOGGING, CORING, AND TESTING PROGRAM

The proposed logging program is indicated in **Table 7**.

**Table 7 Proposed Logging Program** 

Log Suites Depth Range		Remarks		
DIL-SP-LD-CN-GR	Surface Casing to TD  + GR to surface	Standard "triple combo" equivalent with resistivity-spontaneous potential, lithodensity, compensated neutron, gamma ray, and caliper		
Dipole Sonic	± 9,700' to TD	Optional – Operator's discretion Rock property data		
Rotary Sidewall Cores	± 9,972' to TD	Optional – Operator's discretion PP/Lithology data (perm-porosity)		

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the

#### h) ANTICIPATED PRESSURES AND HAZARDS

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.44 psi/ft, and then transition to slightly over pressure in the Price River sequence.

Estimated BHP Douglas Creek (4,260')

Estimated BHP Wasatch (5,830')

Estimated BHP Total Depth (12,115' TVD)

Hydrostatic head of gas/mud

1,874 psi
2,565 psi
5,331 psi
0.22 psi/ft.

Maximum design surface pressure  $0.467 - 0.22 \text{ psi/ft} \times 12,115 \text{ ft} = 2,992 \text{ psi}$ 

No H2S zones are anticipated. No abnormal lost circulation zones are anticipated.

#### i) DIRECTIONAL PROGRAM

This is a directional well. Please see the attached directional profile prepared by Multi-Shot LLC.

#### j) OTHER INFORMATION

Contact Information and Personnel

Mailing Address

Vantage Energy Uinta LLC 116 Inverness Drive, Suite 107 Englewood, CO 80112

Main Number: 303-386-8600 Fax Number: 303-386-8700

Primary Contact: Mark Rothenberg

Office Direct: 303-386-8605 Fax Direct: 303-386-8705 Mobile: 303-885-5462

E-Mail: Mark.Rothenberg@VantageEnergy.com

Drilling Operations: John Moran Office Direct: 303-386-8610 Fax Direct: 303-386-8710 Mobile: 303-249-2234

E-Mail: John.Moran@VantageEnergy.com

Completion/Production Operations: Ed Long

Office Direct: 303-386-8639 Fax Direct: 303-386-8739 Mobile: 720-635-2125

E-Mail: Ed.Long@VantageEnergy.com

Geologist: Andrea Steinle
Office Direct: 303-386-8632
Fax Direct: 303-386-8732
Mobile: 303-408-0994

E-Mail: Andrea.Steinle@VantageEnergy.com

Landman: Michael Holland Office Direct: 303-386-8638 Fax Direct: 303-386-8738 Mobile: 303-396-3443

E-Mail: Michael.Holland@VantageEnergy.com

#### START DATE AND DURATION OF ACTIVITIES

#### Anticipated start date

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about August 1, 2009, with a target spud date of August 15, 2009. It is anticipated the drilling phase will require 25 days.

#### Completion

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 - 60 days.

The total project duration is therefore estimated to be <u>70 - 85 days</u>, and therefore anticipated to be concluded on or about November 10, 2009.

A string of 2-3/8 inch 4.7 lb/ft. N-80 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

#### **VARIANCE REQUESTS**

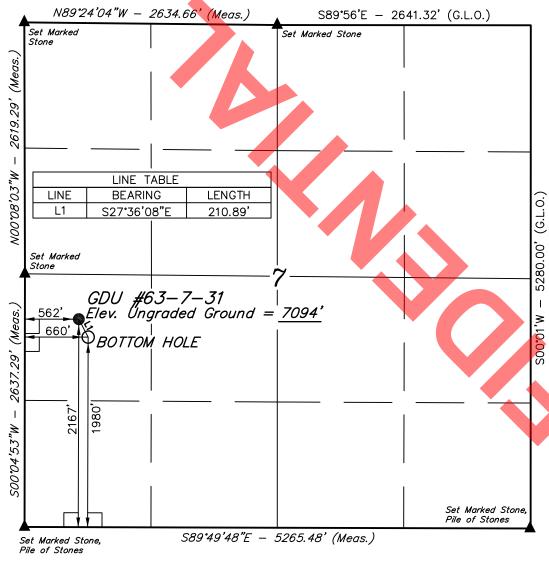
1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to drill the surface hole to a depth of 1,500', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the following equipment shall be in place and operational

Operator requests approval to use a diverter bowl rather then a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 1500'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.

- b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
- c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.

Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

# T6S, R3W, U.S.B.&M.



#### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

#### LEGEND:

 $= 90^{\circ} \text{ SYMBOL}$ 

= PROPOSED WELL HEAD.

SECTION CORNERS LOCATED

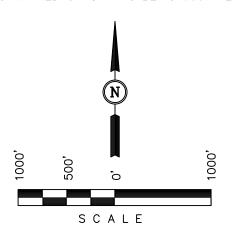
	NAD 83 (BOTTOM HOLE LOCATION)	
		LATITUDE = 39*58'22.81" (39.973003)
	LONGITUDE = 110°16'21.60" (110.272667)	LONGITUDE = 110°16'22.85" (110.273014)
	NAD OF (DOTTOM HOLE LOCATION)	or (oungles of look Tour)
	NAD 27 (BOTTOM HOLE LOCATION)	
).	LATITUDE = 39.58.21.09" (39.972525)	LATITUDE = 39°58'22.94" (39.973039)
).	LATITUDE = 39.58.21.09" (39.972525)	

#### Vantage Energy Uinta LLC

Well location, GDU #63-7-31, located as shown in the SW 1/4 NW 1/4 of Section 7, T6S, R3W, U.S.B.&M., Duchesne County, Utah.

#### BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLANAS PREPARED STOFFIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO BEST OF MY KNOWLEDGE AND BELIEF NO. 161319

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF JAHTE CE

DATE DRAWN:

REVISED: 12-17-08 L.K.

## Untah Engineering & Land Surveying 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE

1" = 1000'

DATE SURVEYED:

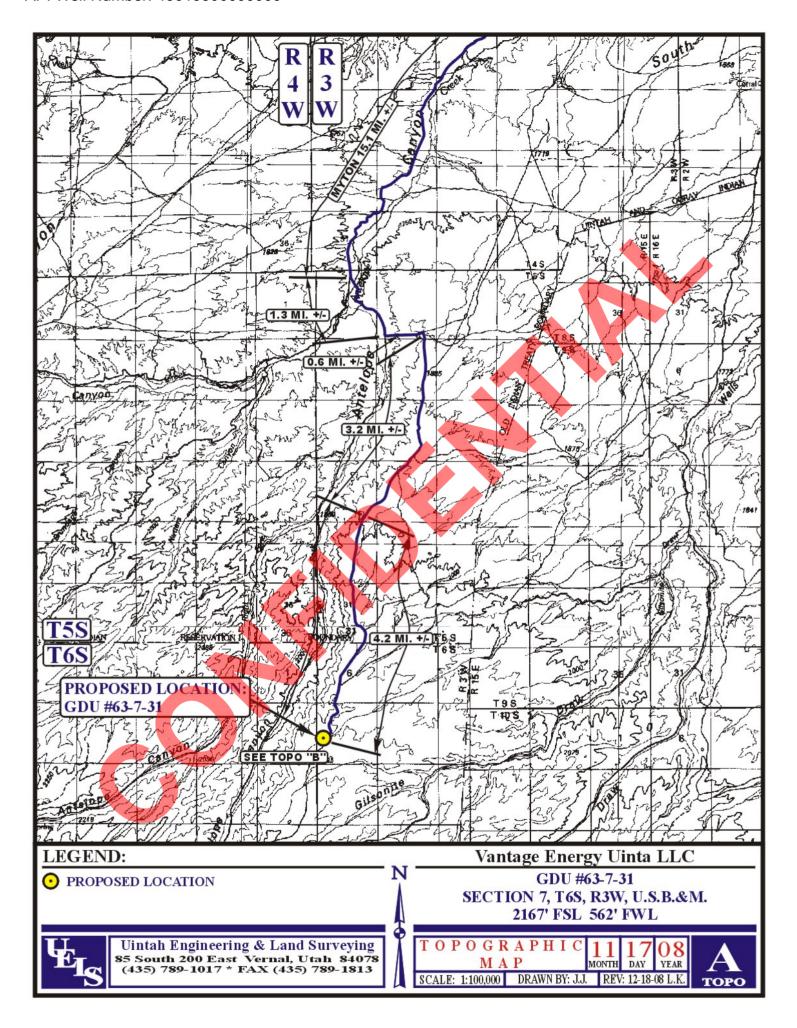
11-06-08

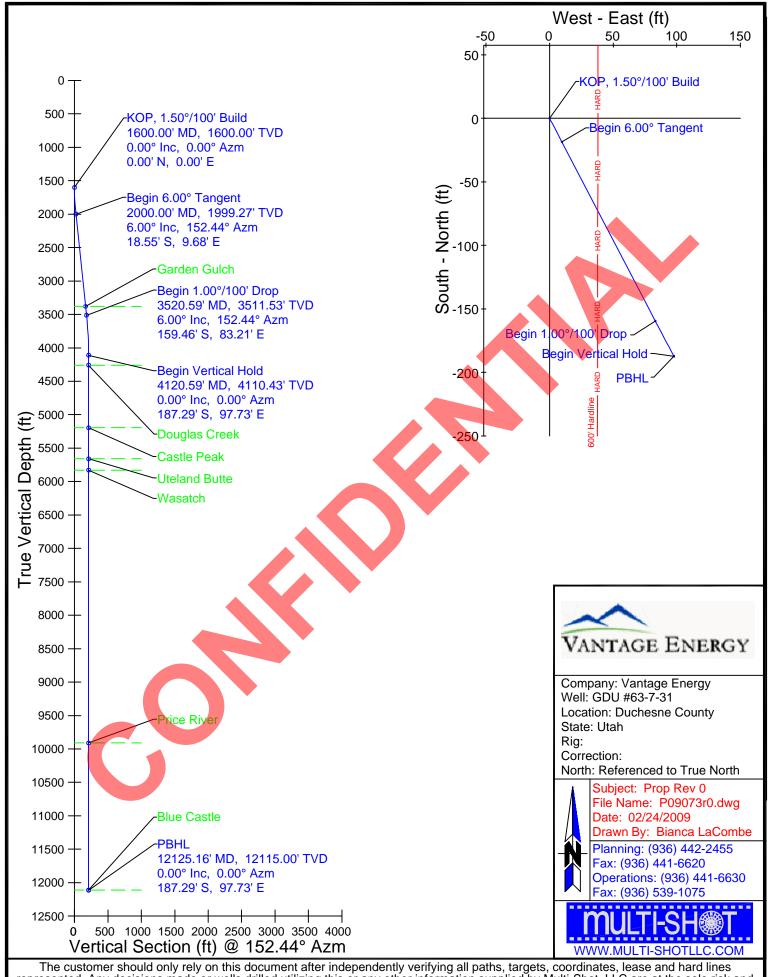
 1" = 1000'
 11-06-08
 11-14-08

 PARTY
 REFERENCES
 G.L.O. PLAT

 WEATHER
 FILE

 WARM
 Vantage Energy Uinta LLC





The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by Multi-Shot, LLC are at the sole risk and responsibility of the customer. Multi-Shot, LLC is not responsible for the accuracy of this schematic or the information contained herein.

MULTI-SH®T

Job Number: P09-073

Company: Vantage Energy

Lease/Well: GDU #63-7-31

**Location: Duchesne County** 

Rig Name:

RKB:

G.L. or M.S.L.: 7094'

State/Country: Utah

Declination:

Grid: Referenced to True North

File name: F:\WELLPL~1\2009\P09070'S\P09073\09073.SVY

Date/Time: 24-Feb-09 / 11:00 Curve Name: Prop Rev 0

# WINSERVE PROPOSAL REPORT Minimum Curvature Method Vertical Section Plane 152.44 ortical Section Performed to Wallhard

Vertical Section Referenced to Wellhead Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT		S U R E Direction Deg	Dogleg Severity Deg/100
KOP, 1.50	°/100' Bui	ld							
1600.00	.00	.00	1600.00	.00	.00	.00	.00	.00	.00
1700.00	1.50	152.44	1699.99	-1,16	.61	1.31	1.31	152.44	1.50
1800.00	3.00	152.44	1799.91	-4.64	2.42	5.23	5.23	152.44	1.50
1900.00	4.50	152.44	1899.69	-10.44	5.45	11.77	11.77	152.44	1.50
Begin 6.00	0° Tangen	t							
2000.00	6.00	152.44	1999.27	-18.55	9.68	20.92	20.92	152.44	1.50
Garden G	ulch								
3388.34	6.00	152.44	3380.00	-147.21	76.82	166.05	166.05	152.44	.00
Begin 1.00	0°/10 <mark>0' D</mark> ro	ор							
3520.59	6.00	152.44	3511.53	-159.46	83.21	179.87	179.87	152.44	.00
3620.59	5.00	152.44	3611.07	-167.96	87.65	189.45	189.45	152.44	1.00
3720.59	4.00	152.44	3710.76	-174.92	91.28	197.30	197.30	152.44	1.00
3820.59	3.00	152.44	3810.57	-180.33	94.10	203.40	203.40	152.44	1.00
3920.59	2.00	152.44	3910.47	-184.20	96.12	207.77	207.77	152.44	1.00
4020.59	1.00	152.44	4010.44	-186.52	97.33	210.38	210.38	152.44	1.00
Begin Ver	tical Hold								
4120.59	.00	.00	4110.43	-187.29	97.73	211.26	211.26	152.44	1.00
Douglas C	reek								
4270.16	.00	.00	4260.00	-187.29	97.73	211.26	211.26	152.44	.00

Page 1

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S Distance FT	S U R E Direction Deg	Dogleg Severity Deg/100
Castle Pe	ak								
5205.16	.00	.00	5195.00	-187.29	97.73	211.26	211.26	152.44	.00
Uteland B	utte								
5670.16	.00	.00	5660.00	-187.29	97.73	211.26	211.26	152.44	.00
Wasatch									
5840.16	.00	.00	5830.00	-187.29	97.73	211.26	211.26	152.44	.00
Price Rive	er								
9920.16	.00	.00	9910.00	-187.29	97.73	211.26	211.26	152.44	.00
Blue Cast	:le								
12120.16	.00	.00	12110.00	-187.29	97.73	211.26	211.26	152.44	.00
PBHL									
12125.16	.00	.00	12115.00	-187.29	97.73	211.26	211.26	152.44	.01

#### **SURFACE USE PLAN OF OPERATIONS**

Vantage Energy Uinta LLC respectfully requests that all information regarding this well be kept CONFIDENTIAL.

This Application for Permit to Drill (APD) is being filed under the APD process as stated per Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents.

#### THIS APD ALSO SERVES AS THE NOTICE OF STAKING PER OSO #1.

This document was prepared using language and requirements consistent with those previously approved by BLM/USFS. This APD process has included the following:

- Consultation with the Surface Management Agency, United State Forest Service (USFS) to initiate the National Environmental Policy Act (NEPA) process for this specific wellsite along with other nearby proposed wellsites in September 8, 2008.
- Meeting with USFS at the wellsite on October 15, 2008, to review the topography, access and site specific surface use issues. Preliminary wellsite staking was initiated at this time.
- Authorization to conduct an archaeological survey was received from USFS on October 27, 2008. The archaeological survey was conducted shortly thereafter.
- Preliminary wellsite staking was completed on October 15, 2008. The wellsite was surveyed and staked at a location as preliminarily agreed to with USFS at 2,167' FSL 562' FWL (NW/4 SW/4) of Sec. 7 T6S R3W on November 6, 2008, by Uintah Engineering & Land Surveying (Uintah), surveyor, on a site that is geologically and topographically acceptable.
- A wellsite review and NEPA planning meeting was held at the USFS office in Vernal, Utah on January 22, 2009. Attending were USFS, BLM, Petros Environmental (NEPA Contractor) and Vantage.
- The survey plats were finalized after the January 22, 2009 meeting and are as attached.

We understand that an onsite meeting with USFS/BLM representatives, and Vantage will be scheduled, at which time the specific concerns of USFS/BLM and Vantage will be discussed. Best efforts have been made to address specific concerns of the USFS.

Please contact David Banko at 303-820-4480 to arrange an onsite meeting.

#### WELL LOCATION AND INTRODUCTION

The wellsite was surveyed and staked at 2,167' FSL 562' FWL (NW/4 SW/4) of Sec. 7 T6S R3W on November 6, 2008, by Uintah, in the Ashley National Forest and a site that was geologically and topographically acceptable. The wellsite and access road fall within the boundary of the Gilsonite Draw Unit identified by Serial Register No. UTU86249X.

#### **DIRECTIONS TO LOCATION:**

From the intersection of State Highway 40 and Antelope Canyon Road southeast of Bridgeland, Utah, travel south/southwesterly  $\pm 3.3$  miles to an existing gravel resource road. Turn left and travel easterly for  $\pm 1.4$  miles to a "Y" intersection. Turn right on Gilsonite Ridge Road, which becomes the National Forest Road (FR) 337 at the Ashley National Forest boundary, and travel southerly for  $\pm 9.5$  miles to the staked proposed access road. Turn right and travel westerly, then northerly on the staked access road for  $\pm 0.10$  miles to the proposed location.

#### 1) EXISTING ROADS

This APD will serve as a request for USFS/BLM to initiate a Right-of-Way (ROW) application for access roads and water haul routes, if necessary. This ROW can continue up to the wellhead. Width of ROW requested is 40 feet.

The well is an exploratory well.

- A) Existing roads with 2.00 miles consist of a maintained dirt and gravel surfaced road forest road within 0.10 miles of the location, which will provide access to the proposed location.
- B) The existing road will be upgraded to the minimum degree necessary. Upgrading may include ditching, drainage, graveling, crowning, capping the roadbed as necessary to provide a well constructed safe road; however, because this is an exploratory well, improvements to the access road will consist of the minimum construction needed for safe travel. Prior to any upgrading, the road will be cleared of any snow cover and allowed to dry completely. Upgrading will not be allowed during muddy conditions. Should mud holes develop, they will be filled in and detours around them avoided.
- C) The existing roads will be maintained and repaired as necessary.

#### 2) <u>PLANNED ACCESS ROADS</u>

This APD will serve as a request for USFS/BLM to initiate a ROW application for access roads and water haul routes. Please contact us if authorized federal access ROW to this location is not in order, or if USFS/BLM has additional requirements.

0.10 miles – Total new road construction, Sec. 7 T6S R3W – USFS, on lease

- Running surface width to be  $\pm 14^{\circ}$   $\pm 16^{\circ}$ , total disturbed width to be no more than 40°. Plans for improvement and/or maintenance of existing roads are to maintain in as good or better conditions that at present. A regular maintenance plan will include, but not be limited to blading, ditching, and surfacing.
- B) Borrow ditches to be backsloped 3:1 or shallower. Weather permitting, the access road will be mowed and the borrow ditch material will be pulled over the top of the mowed area.
- C) Maximum grade will not exceed BLM standards.
- D) No culverts are anticipated.
- E) Surfacing material, if necessary, to consist of native material from borrow ditches, topsoil will be buried in road crown.
- F) No major road cuts are necessary.
- G) Fence cuts, gates, and cattleguards will not be required.

Road construction on public lands shall meet the minimum standards listed in BLM Manual Section 9113 and shall be constructed under the direction of a qualified construction supervisor(s). The qualified construction supervisor shall be an engineer, company superintendent or other representative who is competent and knowledgeable in oilfield road and drillsite construction, and able to speak for the operator. The dirt contractor, or drilling/completion foremen whose primary expertise is not in construction, do not qualify as construction supervisors.

I) The proposed access road connects to county maintained Gilsonite Ridge Road, aka FR 337. A County Approach Permit with Duchesne County is required with an associated fee of \$75.00. The application will be submitted to the Duchesne County Road and Bridge Department in Duchesne, Utah, along with a check for the permit fee. We anticipate the permit will be approved in approximately 30 days. The approach will be inspected and approved by the road supervisor before and after construction.

#### 3) LOCATION OF EXISTING WELLS WITHIN A TWO MILE RADIUS

Proposed NONE

Drilling SEE TABLE 8
Abandoned SEE TABLE 8
Disposal/Injection NONE

Disposal/Injection NONE

Shut-In SEE TABLE 8
Producing SEE TABLE 8

#### LOCATION OF EXISTING FACILITIES OPERATED BY VANTAGE

T6S R3W Sec 20 NW/4NW/4 Shut-In

#### 4) <u>NEW PRODUCTION FACILITIES PROPOSED</u>

- A) USFS/BLM will be contacted prior to construction of production facilities. A Sundry Notice (SN) will be filed if requested by BLM.
- B) Dimension of Proposed Facility of the pad is ±325' long and ±270' wide, containing ±2.0 acres, with a total well site disturbance of ±2.316 acres. The well access road is ±0.10 miles long with a 30' right-of-way, disturbing ±0.425 acre. New surface disturbance associated with access road and the well pad is estimated to be ±2.741 acres. No pipelines or surface facilities are proposed. See attached plats and Topo Map B.
- Traveled portion of production site will be gravel surfaced upon completion of production facility installation and prior to production. Site preparation for production will be done with standard excavation equipment using native materials. Additional surface material will be obtained from commercial sources or an approved borrow area. Construction and maintenance will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil will be deemed too wet.
- D) All above ground permanent structures will be painted to blend with the surrounding landscape. The color used will be as agreed upon with USFS/BLM. To reduce the view of production facilities from visibility corridors and private residences, facilities will not be placed in visually exposed locations (such as ridgelines and hilltops). The tallest structure will be no greater than 22' in height.

Production facilities may vary according to actual reservoir discovered and will be engineered upon completion of well tests. Production facilities will be clustered and placed away from cut/fill slopes to allow the maximum recontouring of cut/fill slopes.

- F) If well is a producer, all production facilities will be authorized by a SN.
- G) No facilities will be constructed off location.
- H) Pursuant to Onshore Order No. 7 (OSO #7), this is a request for authorization for reserve pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by BLM and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method will be submitted along with any necessary water analyses, in compliance with OSO #7 as soon as possible, but no later than 45 days after the date of first production. Any method of disposal, which has not been approved prior to the end of the authorized 90-day period, will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by BLM.

#### 5) LOCATION AND TYPE OF WATER SUPPLY

- A) Water supply will be from the Ouray Municipal Water Plant at Ouray, Utah, and/or Target Trucking Inc.'s water source in the SW/SW, Sec. 35 T9S R22E, Uintah County, than (State Water Right No. 49-1501). Water will be hauled by a licensed trucking company.
- B) If drilling the conductor or surface hole indicates the existence of water bearing zones, Operator will consider drilling a water well on the location to provide a more viable water source. Drilling a water well would reduce truck travel to the well site. No additional disturbance will result from drilling a water well. If a water well is drilled, it would be properly permitted with the Utah Division of Water Rights.

#### 6) SOURCE OF CONSTRUCTION MATERIALS

- A) All construction material for these location sites and access roads shall be of native borrow and soil material accumulated during the construction of the location sites and access road. Surface disturbance will be minimized to the extent feasible.
- B) All construction materials will come from federal land.
- C) No mineral materials will be required.

#### 7) WASTE DISPOSAL

- A) Drill cuttings will be buried in reserve pit when dry.
- B) Drilling fluid will be evaporated and then buried in the reserve pit when dry. A "Closed Mud System" may be used if technically feasible and available at the time of drilling operations. If so, water may be hauled to and used at another drillsite in the area.
- C) Completion fluids will be flowed to the reserve pit and allowed to evaporate.
- D) Reserve pit layout is illustrated on Figures 1 and 2
- E) Reserve pit will be lined with a synthetic liner 12 mil or thicker. The reserve pit liner shall be made of any manmade synthetic material of sufficient size and qualities to sustain a hydraulic conductivity no greater than 1 x 10<sup>-7</sup> cm/sec after installation and which is sufficiently reinforced to withstand normal wear and tear associated with the installation and pit use thereof. The liner shall be chemically compatible with all substances that may be put into the pit.

#### 8) ANCILLARY FACILTIES

No ancillary facilities are proposed.

#### 9) WELLSITE LAYOUT

- A) See attached drillsite plat and cut/fill diagram.
- B) Roads and well production equipment, such as tanks, treaters, separators, vents, electrical boxes, and equipment associated with pipeline operation, will be placed on location so as to permit maximum interim reclamation of disturbed areas. If equipment is found to interfere with the proper interim reclamation of disturbed areas, the equipment may be moved so proper recontouring and revegetation can occur.
- C) 6" of topsoil will be removed prior to location construction from the reserve pit area and/or any other disturbed areas. Topsoil will be stockpiled adjacent to the wellsite within the maximum disturbed area shown on the wellsite plat.
- D) Topsoil and spoils pile will be clearly separated as shown on Figure 1.
- E) Erosion control measures will be applied pursuant to Vantage's General Permit to Discharge Stormwater under the Utah Pollutant Discharge Elimination System and accompanying Stormwater Pollution Prevention Plan.
- F) A "Closed Mud System" may be used if technically feasible and available at the time of drilling operations. If so, the reserve pit will be reduced in size.

#### 10) PIPELINES AND FLOWLINES

A separate Right-of-Way (ROW) application for the pipeline route will be submitted separately after consultation with the USFS.

#### 11) PLANS FOR RECLAMATION OF THE SURFACE:

- A) Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil will be deemed too wet.
- B) Earthwork for interim and final reclamation must be completed within six (6) months of well completion or plugging (weather permitting).
- C) In areas that will not be drill-seeded, the seed mix will be broadcast-seeded at twice the application rate shown and covered 0.25 to 0.5 inches deep with a harrow or drag bar or will be broadcast-seeded into imprints, such as fresh dozer cleat marks.



#### INTERIM RESTORATION (Production)

- A) Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut/fill slopes. These areas will be re-seeded.
- B) Wellpad size will be reduced to minimum size necessary to conduct safe operations. Cut/fills will be reduced to 3:1 or shallower.
- C) Reserve pits will be closed and backfilled as soon as the pit contents are dry enough to do so, or no later than the end of the next full summer following rig release, whichever comes first, to allow sufficient time for the pit contents to dry. Reserve pits remaining open after this period will require written authorization of the AO. Immediately upon well completion, any hydrocarbons or trash in the reserve and flare pits will be removed. Pits will be allowed to dry, be pumped dry, or solidified in-situ prior to backfilling.
- Following completion activities, pit liners will be removed or removed to the solids level and disposed of at an approved landfill, or treated to prevent their reemergence to the surface and interference with long-term successful revegetation. If it was necessary to line the pit with a synthetic liner, the pit will not be trenched (cut) or filled (squeezed) while containing fluids. When dry, the pit will be backfilled with a minimum of five (5) feet of soil material. In relatively flat areas, the pit area will be slightly mounded to allow for settling and to promote surface drainage away from the backfilled pit.
- E) The portions of the cleared well site not needed for operational and safety purposes will be recontoured to the original contour if feasible, or if not feasible, to an interim contour that



#### 1.60#/acre PLS – Western Wheatgrass (Arriba or Barton)

9.25#/acre PLS – TOTAL

- J) Reclamation will be considered successful if the following criteria are met:
  - · 70 percent of predisturbance cover.
  - · 90 percent dominate species\*
  - · Erosion features equal to or less than surrounding area

The vegetation will consist of species included in the seed mix and/or occurring in the surrounding natural vegetation.

#### FINAL RESTORATION (P & A – Removal of equipment)

- A) Flowlines on location will be removed before site reclamation and all flowlines between the wellsite and production facilities will remain in place and will be filled with water.
- B) If necessary to ensure timely revegetation, the pad will be fenced to USFS standards to exclude livestock grazing for the first two growing seasons or until seeded species become firmly established, whichever comes later. Fencing will meet standards found on page 18 of the BLM Gold Book, 4<sup>th</sup> Edition, or will be fenced with operational electric fencing.
- C) Revegetation will be accomplished by planting mixed grasses as specified below. Revegetation is recommended for road area as well as around production site.
- A proposed seed mixture for this location is:
  - 4.80#/acre PLS Sand bluestem (Elida, Garden)
  - 0.20#/acre PLS Sand lovegrass (Bend)
  - 1.35#/acre PLS Switchgrass (Granvillo or Blackwolf)
  - 1.30#/acre PLS Prairie sandreed (Goshen)
  - 1.60#/acre PLS Western Wheatgrass (Arriba or Barton)
  - 9.25#/acre PLS TOTAL



#### 12) <u>General Information</u>

- A) Project area is situated in the undulated uplands of the western part of the Uintah Basin.
- B) Topographic and geologic features moderate relief area, moderately drained, sand-clay deposition, surrounded by steep uplands with highly eroded drainages.
- C) Soil characteristics clay loam.
- D) Flora consists of: Piñon pine, Juniper, Sagebrush, and short grasses. Please refer to archaeological report and botany report to be included in the NEPA document.
- E) Fauna none observed. Please refer to the wildlife report to be included in the NEPA document.
- F) Concurrent surface use grazing and hunting.
- G) Mineral Lessor:

Bureau of Land Management, Vernal Field Office 170 South 500 East, Vernal, UT 84078 Phone: 435-781-4400; Fax: 435-781-4410

H) Surface Management Agency:

U.S. Forest Service, Duchesne Ranger District 85 W. Main St., Duchesne, UT 84021 Phone: 435-738-2482; Fax: 435-781-5215

- Proximity of water, occupied dwellings or other features: un-named intermittent drainage ±300' to the southeast; flowing into Gilsonite Draw.
- J) Archaeological, cultural and historical information for the new construction on federal lands will be submitted separately by Montgomery Archaeological Consultants.
- K) If any fossils are discovered during construction, the operator shall cease construction immediately and notify the AO so as to determine the significance of the discovery.
- L) A Class III (100% pedestrian) cultural resource inventory shall be completed prior to disturbance by a qualified professional archaeologist in the following areas: Well location. A report of the inventory will be submitted and approved by the BLM with stipulations as appropriate in order to comply with EO 11593 and Section 106 of the National Historic Preservation Act of 1966. See Section "General Information K" above.

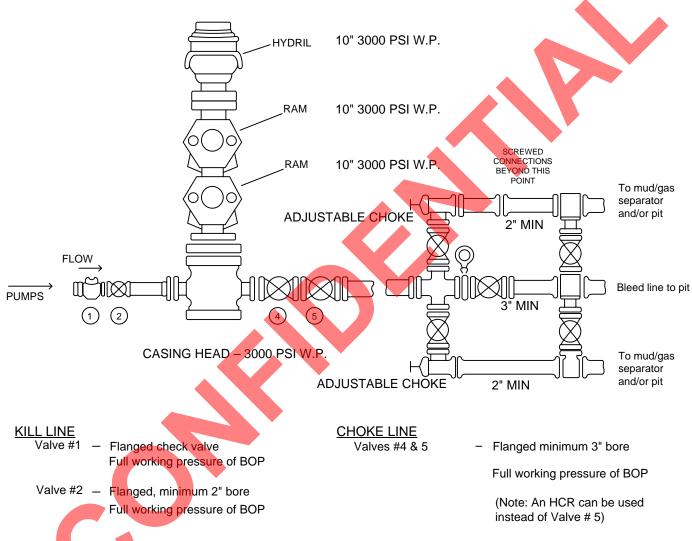
The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the AO. The AO will inform the operator as to the work needed to determine the following:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the site can be used (assuming in site preservation is not necessary); and,
- A timeframe for the AO to complete an expedited review to acquire the State Historic Preservation Officer's concurrence that the findings of the AO are correct and that mitigation is appropriate.
- N) Vantage maintains a file, per 29 CFR 1910.1200(g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous substances, EHS, and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

# MINIMUM BOP Requirements

3000 PSI W.P.





#### **GENERAL RULES AND RECOMMENDATIONS**

All lines to manifold are to be at right angles (90 deg.). No 45 deg. angles are to be used. Blind flanges are to be used for blanking. All studs and nuts are to be installed on all flanges.



Ms. Diana Mason State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114

Re: <u>Directional Drilling R649-3-11</u>

Vantage Energy Uinta, LLC

GDU 63-7-31

SHL: 2,167' FSL 562' FWL (NW/4 SW/4) BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4)

Sec. 7 T6S R3E Duchesne County, Utah

Surface: Federal

Mineral: Federal Mineral Lease UTU78235

Dear Ms. Mason:

Pursuant to the filing of Vantage Energy Uinta LLC's (Vantage) Application for Permit to Drill regarding the above referenced well on March 25, 2011, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11, pertaining to the Exception of Location and Sitting of Wells.

- GDU 63-7-31 is an exploratory well located within the Gilsonite Draw Federal Unit No. UTU86249X.
- Vantage is permitting this well as stipulated by the United States Forest Service as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Vantage will be able to utilize any proposed roads and or pipelines in the area.
- Vantage is the unit operator of the Gilsonite Draw Federal Unit. As it pertains to all depths from the surface to the base of the Wasatch Formation, Vantage certifies it is the sole working interest owner within 460 feet of the entire directional well bore and within Section 7 (federal oil and gas lease UTU 78235). As to all depths deeper than the Base of the Wasatch Formation, the sole working interest owner is Exxon Mobil Corporation (XOM). Vantage and XOM have entered into a mutually executed Exploration Agreement that provides for the possible development of those deeper depths.

April 14, 2011

Oil, Gas & Mining

April 14, 2011 Utah Division

Page 2 of 2

Based on the above stated information, Vantage requests the permit be granted pursuant to the terms and conditions of Rule R649-3-11.

Sincerely,

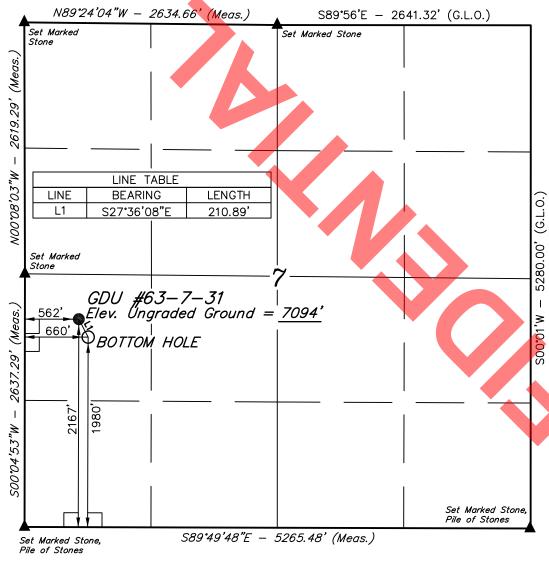
VANTAGE ENERGY UINTA, LLC

Michael Holland Senior Landman

mis. Hell

Cc: mth, jm, rs, tt, kh, su, David Banko, Kim Rodell (Banko Petroleum Management)

# T6S, R3W, U.S.B.&M.



#### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

#### LEGEND:

 $= 90^{\circ} \text{ SYMBOL}$ 

= PROPOSED WELL HEAD.

SECTION CORNERS LOCATED

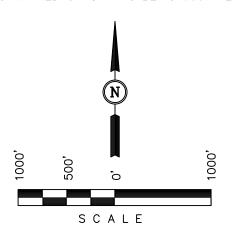
	NAD 83 (BOTTOM HOLE LOCATION)	
		LATITUDE = 39*58'22.81" (39.973003)
	LONGITUDE = 110°16'21.60" (110.272667)	LONGITUDE = 11016'22.85" (110.273014)
	NAD OF (DOTTOM HOLE LOCATION)	1115 OF (OUDELOF LOCATION)
	NAD 27 (BOTTOM HOLE LOCATION)	
).	LATITUDE = 39.58.21.09" (39.972525)	LATITUDE = 39'58'22.94" (39.973039)
).	LATITUDE = 39.58.21.09" (39.972525)	

#### Vantage Energy Uinta LLC

Well location, GDU #63-7-31, located as shown in the SW 1/4 NW 1/4 of Section 7, T6S, R3W, U.S.B.&M., Duchesne County, Utah.

#### BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLANAS PREPARED STOFFIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO BEST OF MY KNOWLEDGE AND BELIEF NO. 161319

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF JAHTE CE

DATE DRAWN:

REVISED: 12-17-08 L.K.

## Untah Engineering & Land Surveying 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE

1" = 1000'

DATE SURVEYED:

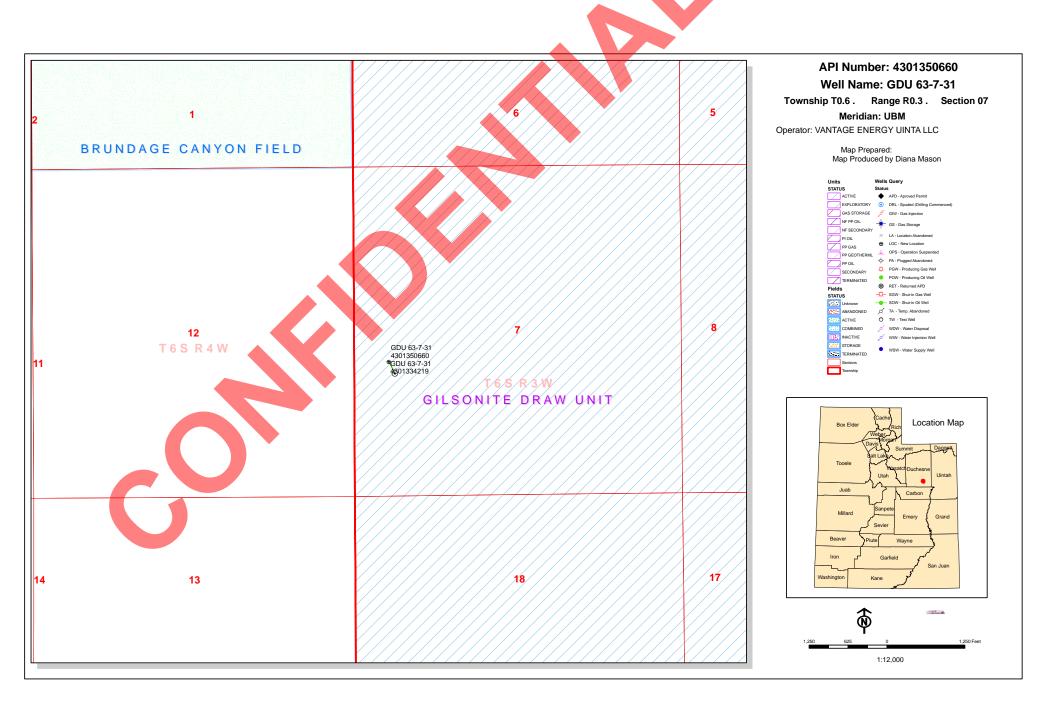
11-06-08

 1" = 1000'
 11-06-08
 11-14-08

 PARTY
 REFERENCES
 G.L.O. PLAT

 WEATHER
 FILE

 WARM
 Vantage Energy Uinta LLC



# **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

March 30, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Gilsonite Draw Unit,

Duchesne County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2011 within the Gilsonite Draw Unit, Duchesne County, Utah. The well was previously permitted under API 43-013-34219; please see our meme dated March 9, 2009.

API# WELL NAME LOCATION

(Proposed PZ Mesaverde)

43-013-50660 GDU 63-7-31 Sec 07 T6S R3W 2167 FSL 0562 FWL BHL Sec 07 T6S R3W 1980 FSL 0660 FWL

This office has no objection to permitting the well at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard

Div. cra-Michael L. Coulthard, o-Bureau of Land Management, ou-Branch of

Michael L. Coulthard

Div. cra-Michael, Coulthard

Date: 2011.03.30 11:5523 -0600'

bcc: File - Gilsonite Draw Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:3-30-11

**RECEIVED: Mar. 30, 2011** 

#### **WORKSHEET** APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 3/25/2011 API NO. ASSIGNED: 43013506600000

**WELL NAME: GDU 63-7-31** 

**PHONE NUMBER:** 303 820-4480 **OPERATOR:** VANTAGE ENERGY UINTA LLC (N3295)

**CONTACT:** David F. Banko

PROPOSED LOCATION: NWSW 07 060S 030W **Permit Tech Review:** 

> SURFACE: 2167 FSL 0562 FWL **Engineering Review:**

**BOTTOM:** 1980 FSL 0660 FWL **Geology Review:** 

**COUNTY: DUCHESNE LATITUDE:** 39.97301

UTM SURF EASTINGS: 562147.00

FIELD NAME: UNDESIGNATED

LEASE TYPE: 1 - Federal

**LEASE NUMBER: UTU78235** PROPOSED PRODUCING FORMATION(S): MESA VERDE

SURFACE OWNER: 1 - Federal **COALBED METHANE: NO** 

#### **RECEIVED AND/OR REVIEWED:**

PLAT

Bond: FEDERAL - LPM8907971

**Potash** 

Oil Shale 190-5

**Oil Shale 190-3** 

Oil Shale 190-13

Water Permit: 49-1501

**RDCC Review:** 

**Fee Surface Agreement** 

Intent to Commingle

**Commingling Approved** 

LOCATION AND SITING:

R649-2-3.

Unit: GILSONITE DRAW

R649-3-2. General

R649-3-3. Exception

**Drilling Unit** 

Board Cause No: R649-3-11

LONGITUDE: -110.27225 NORTHINGS: 4424805.00

**Effective Date:** 

Siting:

✓ R649-3-11. Directional Drill

**Comments:** Presite Completed

Stipulations:

4 - Federal Approval - dmason 15 - Directional - dmason 23 - Spacing - dmason

API Well No: 43013506600000



### State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

#### Permit To Drill

\*\*\*\*\*

Well Name: GDU 63-7-31 API Well Number: 43013506600000

Lease Number: UTU78235 Surface Owner: FEDERAL Approval Date: 4/21/2011

#### **Issued to:**

VANTAGE ENERGY UINTA LLC, 116 Inverness Drive East, Ste 107, Englewood, CO 80112

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-11. The expected producing formation or pool is the MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

#### **Notification Requirements:**

API Well No: 43013506600000

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

#### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

For John Rogers Associate Director, Oil & Gas Sundry Number: 25216 API Well Number: 43013506600000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU78235
SUNDR	RY NOTICES AND REPORTS O	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	posals to drill new wells, significantly d reenter plugged wells, or to drill horizon n for such proposals.	eepen existing wells below tal laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: GILSONITE DRAW
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: GDU 63-7-31
2. NAME OF OPERATOR: VANTAGE ENERGY UINTA L	LC		9. API NUMBER: 43013506600000
3. ADDRESS OF OPERATOR: 116 Inverness Drive East, S	Ste 107 , Englewood , CO, 80112	PHONE NUMBER: 303 386-8600 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2167 FSL 0562 FWL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWSW Section:	IIP, RANGE, MERIDIAN: 07 Township: 06.0S Range: 03.0W Meridian: U		STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATI	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF  WILDCAT WELL DETERMINATION  COMPLETED OPERATIONS. Clearly show all attached document for detail		CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  ✓ APD EXTENSION  OTHER:  Depths, volumes, etc.  Approved by the  Utah Division of  Oil, Gas and Mining  Date: May 07, 2012  By:
NAME (PLEASE PRINT) David F. Banko PHONE NUMBER 303 820-4480		R TITLE Permit Agent	
SIGNATURE N/A		<b>DATE</b> 5/1/2012	

Sundry Number: 25216 API Well Number: 43013506600000



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013506600000

API: 43013506600000 Well Name: GDU 63-7-31

Location: 2167 FSL 0562 FWL QTR NWSW SEC 07 TWNP 060S RNG 030W MER U

Company Permit Issued to: VANTAGE ENERGY UINTA LLC

**Date Original Permit Issued:** 4/21/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?       Yes       No
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?  Yes No
• Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes No
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
nature: David F. Banko Date: 5/1/2012

Sig

Title: Permit Agent Representing: VANTAGE ENERGY UINTA LLC

## Vantage Energy Uinta LLC GDU 63-7-31

SHL: 2,167' FSL 562' FWL (NW/4 SW/4)
BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4) within a 60' radius
Sec. 7 T6S R3W
Duchesne County, Utah
Federal Lease: UTU78235

#### NINE POINT DRILLING PROGRAM

(All drilling procedures will comply with BLM Onshore Oil and Gas Orders 1 and 2)

## Vantage Energy Uinta LLC respectfully requests that all information regarding this well be kept CONFIDENTIAL.

This Application for Permit to Drill (APD) is being filed under the APD process as stated per Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents.

#### THIS APD ALSO SERVES AS THE NOTICE OF STAKING PER OSO #1.

This document was prepared using language and requirements consistent with those previously approved by BLM/USFS. This APD process has included the following:

- Consultation with the Surface Management Agency, United State Forest Service (USFS) to initiate the National Environmental Policy Act (NEPA) process for this specific wellsite along with other nearby proposed wellsites in September 8, 2008.
- Meeting with USFS at the wellsite on October 15, 2008, to review the topography, access and site specific surface use issues. Preliminary wellsite staking was initiated at this time.
- Authorization to conduct an archaeological survey was received from USFS on October 27, 2008. The archaeological survey was conducted shortly thereafter.
- Preliminary wellsite staking was completed on October 15, 2008. The wellsite was surveyed and staked at a location as preliminarily agreed to with USFS at 2,167' FSL 562' FWL (NW/4 SW/4) of Sec. 7 T6S R3W on November 6, 2008, by Uintah Engineering & Land Surveying (Uintah), surveyor, on a site that is geologically and topographically acceptable.
- A wellsite review and NEPA planning meeting was held at the USFS office in Vernal, Utah on January 22, 2009. Attending were USFS, BLM, Petros Environmental (NEPA Contractor) and Vantage.
- The survey plats were finalized after the January 22, 2009 meeting and are as attached.

We understand that an onsite meeting with USFS/BLM representatives, and Vantage will be scheduled, at which time the specific concerns of USFS/BLM and Vantage will be discussed. Best efforts have been made to address specific concerns of the USFS.

Please contact Mr. John Moran, Senior Drilling Engineer, with Vantage at 303-386-8600, or Mr. David Banko, Permit Agent at 303-820-4480 or at david@banko1.com if there are any questions or concerns regarding this Drilling Program.

DRILLING PROGRAM GDU 63-7-31

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#### a) GEOLOGIC MARKERS

Anticipated tops of geologic markers are indicated in Table 1

**Table 1 Estimated Tops of Geologic Markers** 

Formation	Vertical Depth	Measured Depth	Subsea Depth	Description		
Green River	Surface	Surface	7,110'	Sandstone/siltstone/shale		
Garden Gulch	3,380'	3,388'	3,730'	Sand and Siltstone		
Douglas Creek	4,260'	4,270'	2,850'	Sandstone/siltstone/shale		
Castle Peak	5,195'	5,205'	1,950'	Sandstone/siltstone/shale		
Uteland Butte	5,660'	5,670'	1,450'	Carbonate/shale/sandstone		
Wasatch	5,830'	5,840'	1,280'	Shale/Sandstone		
Price River	9,910'	9,920'	-2,800'	Shale/Sandstone		
Blue Castle	12,110'	12,120'	-5,000'	Sandstone		
Total Depth	12,115'	12,125	-5,005'	TD +/- 5' into Blue Castle		

Surface Elevation: 7,094' (Ungraded Ground); 7,109' (Est. KB).

Proposed Total Vertical Depth: 12,115' Proposed Total Measured Depth: 12,125

#### b) DEPTHS OF WATER AND MINERAL-BEARING ZONES

Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicated no permitted water wells within three miles of the proposed location. Utah Division of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

**Table 2: Principal Anticipated Water and Mineral-bearing Zones** 

Formation	Measured Depth	Subsea	Potential Contents
Green River	Surface	7,110'	Water
Garden Gulch	3,380'	3,730'	Oil/Gas
Douglas Creek	4,260'	2,850'	Oil/Gas
Castle Peak	5,195'	1,950'	Oil/Gas
Uteland Butte	5,660'	1,450'	Oil/Gas
Wasatch	5,830'	1,280'	Oil/Gas
Price River	9,910'	-2,800'	Oil/Gas
Blue Castle	12,110'	-5,000'	Oil/Gas
Total Depth	12,115'	-5,005'	Oil/Gas/Water

#### c) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

The maximum anticipated surface pressure for this well is calculated to be **2,992 psi**. Therefore, rules for a 3,000 psi rated BOP and choke manifold system are applicable. A diagram of the proposed 3,000 psi rated BOP stack configuration is shown in **Fig. 1**.

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DRILLING PROGRAM GDU 63-7-31

BOPs and choke manifold will be installed and pressure tested before drilling out from under surface casing (subsequent pressure tests will be performed whenever pressure seals are broken) and then will be checked daily as to mechanical operating condition. BOPs will be pressure tested at least once every 30 days. The annular preventer, pipe rams, and blind rams will be activated on each trip and Operator will conduct weekly BOP drills with the rig crew.

Ram type preventers and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. **Please see variance request at end of program for this section.** 

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the USFS/BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22psi/ft or 1,500psi, whichever is greater, not to exceed 70% of internal yield. Please see variance request at end of program for this section.

Casing shoe will be tested by drilling out from below the shoe and testing to the maximum expected mud weight as discussed in the mud program specifications below. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

#### Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2 (OSO #2)* for 3,000 psi systems. Irregardless of the rig selected, the rig's accumulator system shall have sufficient capacity to close all BOPs and retain 200 psi above precharge. The proposed pressure control equipment will meet or exceed standards specified in the Order OSO #2.

#### d) CASING PROGRAM

Casing of quality equal to or better than that indicated in **Tables 3** and **4** will be used for this well. Actual casing used will be dependent on availability.

**Table 3 Proposed Casing Program** 

- · · · · · · - · · · · · · · · · · · ·									
Depth (MD)	<b>Hole Diameter</b>	Casing Diameter Casing Weight and Grade							
$0 - \pm 50$ '	24"	16"	Optional Conductor – Only if Required						
0 – 1,500'	12-1/4"	9-5/8"	36# J-55 ST&C, API New Pipe						
0 – 12,125'	7-7/8"	4-1/2"	11.6# HCP-110 LT&C, API New Pipe						

Table 4: Propose	d Casing S	pecifications and	l Design Safety	y Factors
------------------	------------	-------------------	-----------------	-----------

Size	Collapse (psi)	Burst (psi)	Body Strength (1,000 lbs.)	Joint Strength (1,000 lbs.)	Thread	*	Safety Facto	ors
						Burst	Collapse	Tension
						Design (1.2)	Design (1.0)	Design (1.4)
16"			ructural and to air drilling sur		Weld	NA	NA	NA
9-5/8" 36# J-55	2,020	3,520	564 394		ST&C	1.42	6.27	4.17
4-1/2" 11.6# HCP-110	8,650	10,690	367	279	LT&C	1.25	1.51	1.63

<sup>\*</sup>Safety Factor Calculation Assumptions:

#### **Surface Casing:**

**Burst Load:** Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required casing test pressure.

#### **MASP**

```
Load = (Formation Gradient -0.22 \text{ psi/ft}) * Total Depth, TVD
= (0.467 \text{ psi/ft} - 0.22 \text{ psi/ft}) * 12,115 \text{ ft}.
= 2,992 \text{ psi}
```

#### **TEST PRESSURE**

```
Load = Greater of 1500 psig or 0.70*3520 = 2464 psig or MASP = 3,005 psig SF Burst = 3,520 psi / 2,992 psi = 1.18
```

**Collapse Load:** Assumes worse case loading of evacuated casing during cementing process.

Cement density = 12.2 ppg (wtd avg) Load = 12.2 ppg \* 0.052 \* 1500 ft = 952 psi SF Collapse = 2020 psi / 952 psi = 2.12

51 Conapse – 2020 psi / 502 psi – 2:12

**Tension Load:** Assumes air weight at total depth + 100,000 lbs overpull design factor.

Load = (36 lbs/ft \* 1500 ft) + 100,000 lbs overpull= 154,000 lbs

SF Tension = 394,000 lbs / 154,000 lbs = 2.55

DRILLING PROGRAM GDU 63-7-31

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**Test Pressure =** 

#### **Production Casing**

**Burst Load:** Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

```
Load = 10690 psi * 0.80
= 8552 psi
SF Burst = 10690 psi / 8552 psi = 1.25
```

**Collapse Load:** Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

```
Load = 0.433 psi/ft * 12,115 ft
= 5246 psi
SF Collapse = 8650 psi / 5246 psi = 1.65
```

**Tension Load:** Assumes buoyed weight of casing at total depth + 80,000 lbs overpull design factor.

```
Load = [11.6 lbs/ft * 12,115 ft TVD * ((65.5 – 10.0) / 65.5)] + 80,000 lbs
= 119,079 lbs + 80,000 lbs
= 199,078 lbs
```

SF Tension = 279,000 lbs / 199,078 lbs = 1.40

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#### e) CEMENT PROGRAM

**Table 5: Proposed Cement Program** 

Table 5: Propos			
Measured Depth	Hole Diameter	Casing Diameter	Cement
$0' - \pm 50'$	24"	16"	Optional structural conductor if required: Grout with approximately 4 cubic yards of redi-mix back to surface (includes 100% excess)
			<b>TOC:</b> Surface (Top-off per visual observation)
0' - 1,500'	12-1/4"	9-5/8"	Lead System (1,000' – Surface) 216 sks "Lite" slurry + ¼ lb/sk celloflake.
			Density: 11.0 ppg Yield: 2.90 cuft/sk Water: 15.45 gal/sk Excess: 100%
			Tail System (1,500' – 1,000') + 40' Shoe Joint 205 sks 50:50 (Class G: Poz) + 2% gel + 2% CaCl <sub>2</sub> Density: 14.2 ppg Yield: 1.61 cuft/sk Water: 5.75 gal/sk Excess: 100%
			TOC: Surface (Top-off per visual observation)
0' - 12,125'	7-7/8"	4-1/2"	Lead System (9,500' – 2,500')  543 sks Type "V" + 16% Gel + 10 lbs/sk gilsonite +  3% Salt + ½ lb/sk celloflake  Density: 11.0 ppg  Yield: 3.82 cuft/sk  Water: 23.0 gal/sk  *Excess: 30%
			Tail System (12,125' – 9,500') + 40' Shoe Joint 490 sks 50:50 (Class G:Poz) + 2% gel + 10% salt + 1/4 lb/sk celloflake
			Density: 14.2 ppg Yield: 1.26 cuft/sk Water: 5.75 gal/sk *Excess: 30%

<sup>\*</sup>Note: The production hole cement volume will be determined by the caliper log, using caliper volume + 15% excess factor.

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#### f) MUD PROGRAM

The mud program for the proposed well is indicated in **Table 6.** 

**Table 6 Proposed Mud Program** 

Interval (feet)	Mud Weight (lbs/gallon)	Mud Type				
$0 - \pm 50$	NA	NA	NA	NA		
	Set option	nal 14" conductor with	n bucket rig			
50' - 1500'±	NA	NA	NA N/C			
	Run/o	cement 9-5/8" surface	casing			
1500'± - TD	8.6 – 10.0	28 - 42	< 10	KCL Water /		
1300 ± - 1D	8.0 – 10.0	20 - 42	< 10	PHPA / DAP		
	Run Logs – R	Run/cement 4-1/2" pro	duction casing			

Surface Hole Comments: Spud with "spudder rig" and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. <u>Please see variance requests for this section.</u>

Production Hole Comments: Dump spud mud to reserve pit. Drill out surface casing with fresh water adding 6 ppb DAP (Diammonium Phosphate) for shale inhibition and corrosion control. Circulate the reserve pit and flocculate out drill solids. Use pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,600' "mud up" and "close in" the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and contain any well kicks. Monitoring equipment will be installed on site to detect changes in mud volume.

#### g) LOGGING, CORING, AND TESTING PROGRAM

The proposed logging program is indicated in **Table 7**.

**Table 7 Proposed Logging Program** 

Log Suites	Depth Range	Remarks
DIL-SP-LD-CN-GR	Surface Casing to TD  + GR to surface	Standard "triple combo" equivalent with resistivity-spontaneous potential, lithodensity, compensated neutron, gamma ray, and caliper
Dipole Sonic	± 9,700' to TD	Optional – Operator's discretion Rock property data
Rotary Sidewall Cores	± 9,972' to TD	Optional – Operator's discretion PP/Lithology data (perm-porosity)

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the

Page 8 DRILLING PROGRAM
GDU 63-7-31

Douglas Creek through total depth. Cuttings will be sampled every 20-30 feet.

Prospective zones from the Douglas Creek formation through total depth will be perforated, tested, and potentially acid-washed. It is anticipated that multi-stage hydraulic fracture stimulations of the reservoir will be required.

#### h) ANTICIPATED PRESSURES AND HAZARDS

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.44 psi/ft, and then transition to slightly over pressure in the Price River sequence.

Estimated BHP Douglas Creek (4,260') 1,874 psi Estimated BHP Wasatch (5,830') 2,565 psi Estimated BHP Total Depth (12,115' TVD) 5,331 psi Hydrostatic head of gas/mud 0.22 psi/ft.

**Maximum design surface pressure** 0.467 - 0.22 psi/ft x 12,115 ft = 2,992 psi

No H2S zones are anticipated. No abnormal lost circulation zones are anticipated.

#### i) DIRECTIONAL PROGRAM

This is a directional well. Please see the attached directional profile prepared by Multi-Shot LLC.

#### j) OTHER INFORMATION

Contact Information and Personnel Mailing Address
Vantage Energy Uinta LLC
116 Inverness Drive, Suite 107
Englewood, CO 80112

Main Number: 303-386-8600 Fax Number: 303-386-8700

Drilling Operations: John Moran Office Direct: 303-386-8610 Fax Direct: 303-386-8710 Mobile: 303-249-2234

E-Mail: John.Moran@VantageEnergy.com

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DRILLING PROGRAM GDU 63-7-31

Completion/Production Operations: Ed Long

Office Direct: 303-386-8639 Fax Direct: 303-386-8739 Mobile: 720-635-2125

E-Mail: Ed.Long@VantageEnergy.com

Geologist: Andrea Steinle
Office Direct: 303-386-8632
Fax Direct: 303-386-8732
Mobile: 303-408-0994

E-Mail: Andrea.Steinle@VantageEnergy.com

Landman: Michael Holland Office Direct: 303-386-8638 Fax Direct: 303-386-8738 Mobile: 303-396-3443

E-Mail: Michael.Holland@VantageEnergy.com

#### START DATE AND DURATION OF ACTIVITIES

#### Anticipated start date

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about August 1, 2012, with a target spud date of August 15, 2015. It is anticipated the drilling phase will require 25 days.

#### Completion

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 - 60 days.

The total project duration is therefore estimated to be <u>70 - 85 days</u>, and therefore anticipated to be concluded on or about November 10, 2012.

A string of 2-3/8 inch 4.7 lb/ft. N-80 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

#### **VARIANCE REQUESTS**

1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to drill the surface hole to a depth of 1,500', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the following equipment shall be in place and operational

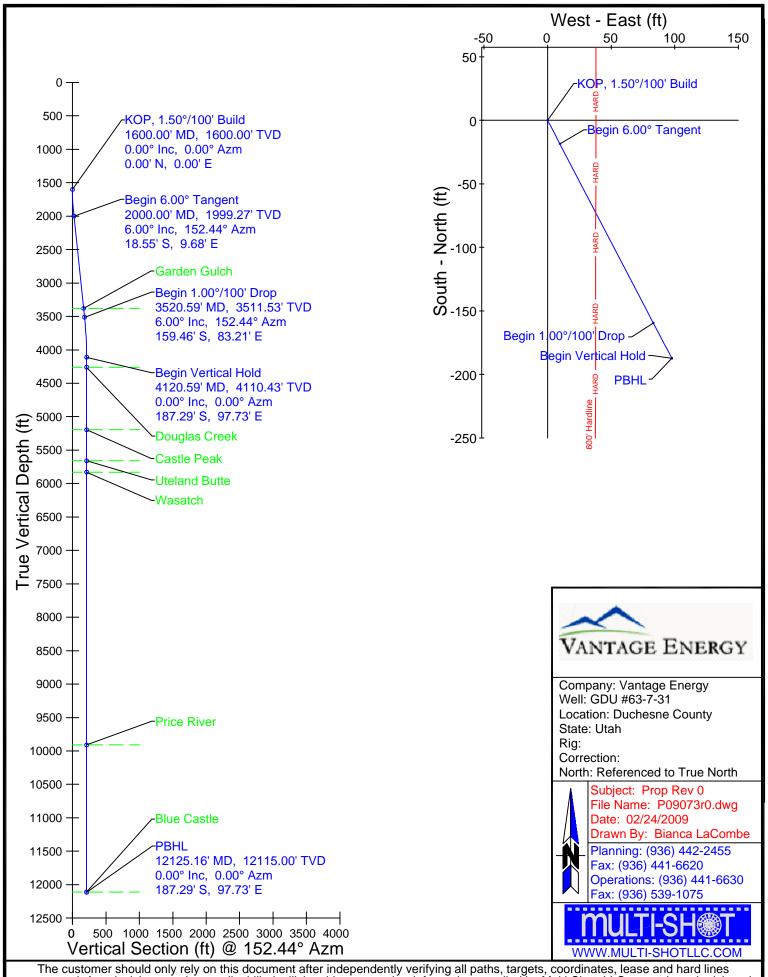
Page 10

DRILLING PROGRAM GDU 63-7-31

during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located...a minimum of 100 feet (100') from the wellbore".

- a. Operator requests approval to use a diverter bowl rather then a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 1500'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
- b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
- c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.

Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.



The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by Multi-Shot, LLC are at the sole risk and responsibility of the customer. Multi-Shot, LLC is not responsible for the accuracy of this schematic or the information contained herein.

**MULTI-SH®T** 

Job Number: P09-073

Company: Vantage Energy

Lease/Well: GDU #63-7-31

**Location: Duchesne County** 

Rig Name:

RKB:

G.L. or M.S.L.: 7094'

State/Country: Utah

Declination:

**Grid: Referenced to True North** 

File name: F:\WELLPL~1\2009\P09070'S\P09073\09073.SVY

Date/Time: 24-Feb-09 / 11:00 Curve Name: Prop Rev 0

# WINSERVE PROPOSAL REPORT Minimum Curvature Method Vertical Section Plane 152.44 Vertical Section Referenced to Wellhead Rectangular Coordinates Referenced to Wellhead

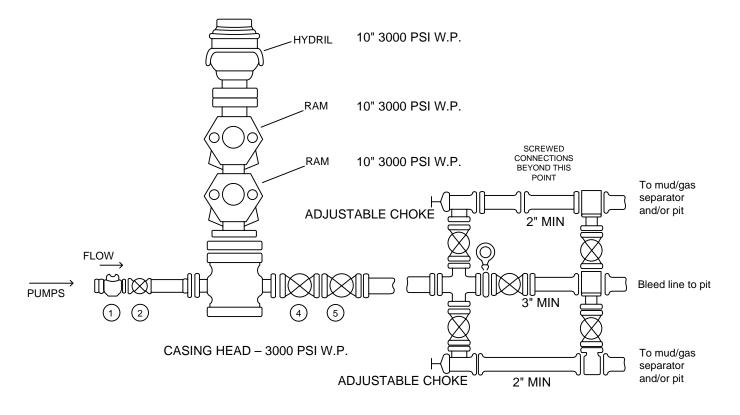
Measured	Incl	Drift	True			Vertical	CLOSURE		Dogleg
Depth FT	Angle Deg	Direction Deg	Vertical Depth	N-S FT	E-W FT	Section FT	Distance FT	Direction Deg	Severity Deg/100
KOP, 1.50	°/100' Bui	ld							
1600.00	.00	.00	1600.00	.00	.00	.00	.00	.00	.00
1700.00	1.50	152.44	1699.99	-1.16	.61	1.31	1.31	152.44	1.50
1800.00	3.00	152.44	1799.91	-4.64	2.42	5.23	5.23	152.44	1.50
1900.00	4.50	152.44	1899.69	-10.44	5.45	11.77	11.77	152.44	1.50
Begin 6.00	0° Tangen	nt							
2000.00	6.00	152.44	1999.27	-18.55	9.68	20.92	20.92	152.44	1.50
Garden G	ulch								
3388.34	6.00	152.44	3380.00	-147.21	76.82	166.05	166.05	152.44	.00
Begin 1.00	0°/100' Dr	ор							
3520.59	6.00	152.44	3511.53	-159.46	83.21	179.87	179.87	152.44	.00
3620.59	5.00	152.44	3611.07	-167.96	87.65	189.45	189.45	152.44	1.00
3720.59	4.00	152.44	3710.76	-174.92	91.28	197.30	197.30	152.44	1.00
3820.59	3.00	152.44	3810.57	-180.33	94.10	203.40	203.40	152.44	1.00
3920.59	2.00	152.44	3910.47	-184.20	96.12	207.77	207.77	152.44	1.00
4020.59	1.00	152.44	4010.44	-186.52	97.33	210.38	210.38	152.44	1.00
Begin Ver	tical Hold	1							
4120.59	.00	.00	4110.43	-187.29	97.73	211.26	211.26	152.44	1.00
Douglas C	Creek								
4270.16	.00	.00	4260.00	-187.29	97.73	211.26	211.26	152.44	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance Direction FT Deg		Dogleg Severity Deg/100
Castle Pe	ak								
5205.16	.00	.00	5195.00	-187.29	97.73	211.26	211.26	152.44	.00
Uteland B	utte								
5670.16	.00	.00	5660.00	-187.29	97.73	211.26	211.26	152.44	.00
Wasatch									
5840.16	.00	.00	5830.00	-187.29	97.73	211.26	211.26	152.44	.00
Price Rive	er								
9920.16	.00	.00	9910.00	-187.29	97.73	211.26	211.26	152.44	.00
Blue Cast	le								
12120.16	.00	.00	12110.00	-187.29	97.73	211.26	211.26	152.44	.00
PBHL									
12125.16	.00	.00	12115.00	-187.29	97.73	211.26	211.26	211.26 152.44	

## MINIMUM BOP Requirements

3000 PSI W.P.

#### FILL LINE ABOVE THE UPPERMOST PREVENTER



 KILL LINE

 Valve #1
 — Flanged check valve
 Valves #4 & 5
 — Flanged minimum 3" bore

 Full working pressure of BOP
 Full working pressure of BOP

 Valve #2
 — Flanged, minimum 2" bore
 (Note: An HCR can be used instead of Valve # 5)

#### GENERAL RULES AND RECOMMENDATIONS

All lines to manifold are to be at right angles (90 deg.). No 45 deg. angles are to be used. Blind flanges are to be used for blanking. All studs and nuts are to be installed on all flanges.



Ms. Diana Mason State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114 March 21, 2012

Re: <u>Directional Drilling R649-3-11</u>

Vantage Energy Uinta, LLC

GDU 63-7-31

SHL: 2,167' FSL 562' FWL (NW/4 SW/4) BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4)

Sec. 7 T6S R3E

Duchesne County, Utah

Surface: Federal

Mineral: Federal Mineral Lease UTU78235

#### Dear Ms. Mason:

Pursuant to the filing of Vantage Energy Uinta LLC's (Vantage) Application for Permit to Drill regarding the above referenced well on March 25, 2011, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11, pertaining to the Exception of Location and Sitting of Wells.

- GDU 63-7-31 is an exploratory well located within the Gilsonite Draw Federal Unit No. UTU86249X.
- Vantage is permitting this well as stipulated by the United States Forest Service as a
  directional well in order to minimize surface disturbance. Locating the well at the surface
  location and directionally drilling from this location, Vantage will be better able to utilize
  any proposed roads and or pipelines in the area.
- Vantage is the unit operator of the Gilsonite Draw Federal Unit. As it pertains to all depths from the surface to the base of the Wasatch Formation, Vantage certifies it is the sole working interest owner within 460 feet of the entire directional well bore and within Section 7 (federal oil and gas lease UTU 78235). As to all depths deeper than the Base of the Wasatch Formation, the sole working interest owner is Exxon Mobil Corporation (XOM). Vantage and XOM have entered into a mutually executed Exploration Agreement that provides for the possible development of those deeper depths.

Utah Division Oil, Gas & Mining

March 21, 2012

Page 2 of 2

Based on the above stated information, Vantage requests the permit be granted pursuant to the terms and conditions of Rule R649-3-11.

Sincerely,

VANTAGE ENERGY UINTA, LLC

Michael Holland Senior Landman

Cc: mth, jm, dv, tt, kh, su, David Banko, Kim Rodell, Andrea Gross (Banko Petroleum Management)

## Vantage Energy Uinta LLC **GDU 63-7-31**

SHL: 2,167' FSL 562' FWL (NW/4 SW/4)
BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4) within a 60' radius
Sec. 7 T6S R3W
Duchesne County, Utah
Federal Lease: UTU78235

#### **SURFACE USE PLAN OF OPERATIONS**

## Vantage Energy Uinta LLC respectfully requests that all information regarding this well be kept CONFIDENTIAL.

This Application for Permit to Drill (APD) is being filed under the APD process as stated per Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents.

#### THIS APD ALSO SERVES AS THE NOTICE OF STAKING PER OSO #1.

This document was prepared using language and requirements consistent with those previously approved by BLM/USFS. This APD process has included the following:

- Consultation with the Surface Management Agency, United State Forest Service (USFS) to initiate the National Environmental Policy Act (NEPA) process for this specific wellsite along with other nearby proposed wellsites in September 8, 2008.
- Meeting with USFS at the wellsite on October 15, 2008, to review the topography, access and site specific surface use issues. Preliminary wellsite staking was initiated at this time.
- Authorization to conduct an archaeological survey was received from USFS on October 27, 2008. The archaeological survey was conducted shortly thereafter.
- Preliminary wellsite staking was completed on October 15, 2008. The wellsite was surveyed and staked at a location as preliminarily agreed to with USFS at 2,167' FSL 562' FWL (NW/4 SW/4) of Sec. 7 T6S R3W on November 6, 2008, by Uintah Engineering & Land Surveying (Uintah), surveyor, on a site that is geologically and topographically acceptable.
- A wellsite review and NEPA planning meeting was held at the USFS office in Vernal, Utah on January 22, 2009. Attending were USFS, BLM, Petros Environmental (NEPA Contractor) and Vantage.
- The survey plats were finalized after the January 22, 2009 meeting and are as attached.

We understand that an onsite meeting with USFS/BLM representatives, and Vantage will be scheduled, at which time the specific concerns of USFS/BLM and Vantage will be discussed. Best efforts have been made to address specific concerns of the USFS.

Please contact David Banko at 303-820-4480 to arrange an onsite meeting.

#### WELL LOCATION AND INTRODUCTION

The wellsite was surveyed and staked at 2,167' FSL 562' FWL (NW/4 SW/4) of Sec. 7 T6S R3W on November 6, 2008, by Uintah, in the Ashley National Forest and a site that was geologically and topographically acceptable. The wellsite and access road fall within the boundary of the Gilsonite Draw Unit identified by Serial Register No. UTU86249X.

SURFACE USE PLAN OF OPERATIONS GDU 63-7-31

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#### **DIRECTIONS TO LOCATION:**

From the intersection of State Highway 40 and Antelope Canyon Road southeast of Bridgeland, Utah, travel south/southwesterly  $\pm 3.3$  miles to an existing gravel resource road. Turn left and travel easterly for  $\pm 1.4$  miles to a "Y" intersection. Turn right on Gilsonite Ridge Road, which becomes the National Forest Road (FR) 337 at the Ashley National Forest boundary, and travel southerly for  $\pm 9.5$  miles to the staked proposed access road. Turn right and travel westerly, then northerly on the staked access road for  $\pm 0.10$  miles to the proposed location.

#### 1) <u>EXISTING ROADS</u>

This APD will serve as a request for USFS/BLM to initiate a Right-of-Way (ROW) application for access roads and water haul routes, if necessary. This ROW can continue up to the wellhead. Width of ROW requested is 40 feet.

The well is an exploratory well.

- A) Existing roads with 2.00 miles consist of a maintained dirt and gravel surfaced road forest road within 0.10 miles of the location, which will provide access to the proposed location.
- B) The existing road will be upgraded to the minimum degree necessary. Upgrading may include ditching, drainage, graveling, crowning, capping the roadbed as necessary to provide a well constructed safe road; however, because this is an exploratory well, improvements to the access road will consist of the minimum construction needed for safe travel. Prior to any upgrading, the road will be cleared of any snow cover and allowed to dry completely. Upgrading will not be allowed during muddy conditions. Should mud holes develop, they will be filled in and detours around them avoided.
- C) The existing roads will be maintained and repaired as necessary.

#### 2) PLANNED ACCESS ROADS

This APD will serve as a request for USFS/BLM to initiate a ROW application for access roads and water haul routes. Please contact us if authorized federal access ROW to this location is not in order, or if USFS/BLM has additional requirements.

0.10 miles – Total new road construction, Sec. 7 T6S R3W – USFS, on lease

- A) Running surface width to be ±14' ±16', total disturbed width to be no more than 40'. Plans for improvement and/or maintenance of existing roads are to maintain in as good or better conditions that at present. A regular maintenance plan will include, but not be limited to blading, ditching, and surfacing.
- B) Borrow ditches to be backsloped 3:1 or shallower. Weather permitting, the access road will be mowed and the borrow ditch material will be pulled over the top of the mowed area.
- C) Maximum grade will not exceed BLM standards.
- D) No culverts are anticipated.
- E) Surfacing material, if necessary, to consist of native material from borrow ditches, topsoil will be buried in road crown.
- F) No major road cuts are necessary.
- G) Fence cuts, gates, and cattleguards will not be required.

#### SURFACE USE PLAN OF OPERATIONS GDU 63-7-31

Page 3

- H) Road construction on public lands shall meet the minimum standards listed in BLM Manual Section 9113 and shall be constructed under the direction of a qualified construction supervisor(s). The qualified construction supervisor shall be an engineer, company superintendent or other representative who is competent and knowledgeable in oilfield road and drillsite construction, and able to speak for the operator. The dirt contractor, or drilling/completion foremen whose primary expertise is not in construction, do not qualify as construction supervisors.
- I) The proposed access road connects to county maintained Gilsonite Ridge Road, aka FR 337. A County Approach Permit with Duchesne County is required with an associated fee of \$75.00. The application will be submitted to the Duchesne County Road and Bridge Department in Duchesne, Utah, along with a check for the permit fee. We anticipate the permit will be approved in approximately 30 days. The approach will be inspected and approved by the road supervisor before and after construction.

#### 3) LOCATION OF EXISTING WELLS WITHIN A TWO MILE RADIUS

Proposed NONE

Drilling SEE WELLS WITHIN A TWO MILE RADIUS TABLE Abandoned SEE WELLS WITHIN A TWO MILE RADIUS TABLE

Disposal/Injection NONE

Shut-In SEE WELLS WITHIN A TWO MILE RADIUS TABLE

Producing SEE WELLS WITHIN A TWO MILE RADIUS TABLE

#### LOCATION OF EXISTING FACILITIES OPERATED BY VANTAGE

T6S R3W Sec 20 NW/4NW/4 Shut-In

#### 4) <u>NEW PRODUCTION FACILITIES PROPOSED</u>

- A) USFS/BLM will be contacted prior to construction of production facilities. A Sundry Notice (SN) will be filed if requested by BLM.
- B) Dimension of Proposed Facility of the pad is  $\pm 325$ ' long and  $\pm 270$ ' wide, containing  $\pm 2.0$  acres, with a total well site disturbance of  $\pm 2.316$  acres. The well access road is  $\pm 0.10$  miles long with a 30' right-of-way, disturbing  $\pm 0.425$  acre. New surface disturbance associated with access road and the well pad is estimated to be  $\pm 2.741$  acres. No pipelines or surface facilities are proposed. See attached plats and Topo Map B.
- C) Traveled portion of production site will be gravel surfaced upon completion of production facility installation and prior to production. Site preparation for production will be done with standard excavation equipment using native materials. Additional surface material will be obtained from commercial sources or an approved borrow area. Construction and maintenance will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil will be deemed too wet.
- D) All above ground permanent structures will be painted to blend with the surrounding landscape. The color used will be as agreed upon with USFS/BLM. To reduce the view of production facilities from visibility corridors and private residences, facilities will not be placed in visually exposed locations (such as ridgelines and hilltops). The tallest structure will be no greater than 22' in height.

#### SURFACE USE PLAN OF OPERATIONS GDU 63-7-31

Page 4

- E) Production facilities may vary according to actual reservoir discovered and will be engineered upon completion of well tests. Production facilities will be clustered and placed away from cut/fill slopes to allow the maximum recontouring of cut/fill slopes.
- F) If well is a producer, all production facilities will be authorized by a SN.
- G) No facilities will be constructed off location.
- H) Pursuant to Onshore Order No. 7 (OSO #7), this is a request for authorization for reserve pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by BLM and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method will be submitted along with any necessary water analyses, in compliance with OSO #7 as soon as possible, but no later than 45 days after the date of first production. Any method of disposal, which has not been approved prior to the end of the authorized 90-day period, will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by BLM.

#### 5) LOCATION AND TYPE OF WATER SUPPLY

- A) Water supply will be from the Ouray Municipal Water Plant at Ouray, Utah, and/or Target Trucking Inc.'s water source in the SW/SW, Sec. 35 T9S R22E, Uintah County, than (State Water Right No. 49-1501). Water will be hauled by a licensed trucking company.
- B) If drilling the conductor or surface hole indicates the existence of water bearing zones, Operator will consider drilling a water well on the location to provide a more viable water source. Drilling a water well would reduce truck travel to the well site. No additional disturbance will result from drilling a water well. If a water well is drilled, it would be properly permitted with the Utah Division of Water Rights.

#### 6) SOURCE OF CONSTRUCTION MATERIALS

- A) All construction material for these location sites and access roads shall be of native borrow and soil material accumulated during the construction of the location sites and access road. Surface disturbance will be minimized to the extent feasible.
- B) All construction materials will come from federal land.
- C) No mineral materials will be required.

#### 7) <u>WASTE DISPOSAL</u>

- A) Drill cuttings will be buried in reserve pit when dry.
- B) Drilling fluid will be evaporated and then buried in the reserve pit when dry. A "Closed Mud System" may be used if technically feasible and available at the time of drilling operations. If so, water may be hauled to and used at another drillsite in the area.
- C) Completion fluids will be flowed to the reserve pit and allowed to evaporate.
- D) Reserve pit layout is illustrated on Figures 1 and 2
- E) Reserve pit will be lined with a synthetic liner 12 mil or thicker. The reserve pit liner shall be made of any manmade synthetic material of sufficient size and qualities to sustain a hydraulic conductivity no greater than 1 x 10<sup>-7</sup> cm/sec after installation and which is sufficiently reinforced to withstand normal wear and tear associated with the installation and pit use thereof. The liner shall be chemically compatible with all substances that may be put into the pit.

#### SURFACE USE PLAN OF OPERATIONS GDU 63-7-31

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- F) Reserve pit will be fenced on three sides during drilling operations, and on fourth side at time of rig release. Pit will remain fenced until backfilled.
- G) Flare pit for air drilling will (if used) be located minimum 100' from wellbore.
- H) Produced fluid will be contained in test tanks during completion and testing.
- I) Sewage disposal facilities will be in accordance with State and Local Regulations.
- J) Garbage and other waste solid waste will be contained in a portable trash cage which will be totally enclosed with small mesh wire. Cage and contents will be transported to and trash dumped at a UDEQ approved Sanitary Landfill upon completion of operations.
- K) Trash will be contained in trash cage at all times.
- L) Upon release of the drilling rig, rathole and mousehole will be filled. Debris and equipment not required for production will be removed.

#### 8) <u>ANCILLARY FACILTIES</u>

No ancillary facilities are proposed.

#### 9) <u>WELLSITE LAYOUT</u>

- A) See attached drillsite plat and cut/fill diagram.
- B) Roads and well production equipment, such as tanks, treaters, separators, vents, electrical boxes, and equipment associated with pipeline operation, will be placed on location so as to permit maximum interim reclamation of disturbed areas. If equipment is found to interfere with the proper interim reclamation of disturbed areas, the equipment may be moved so proper recontouring and revegetation can occur.
- C) 6" of topsoil will be removed prior to location construction from the reserve pit area and/or any other disturbed areas. Topsoil will be stockpiled adjacent to the wellsite within the maximum disturbed area shown on the wellsite plat.
- D) Topsoil and spoils pile will be clearly separated as shown on Figure 1.
- E) Erosion control measures will be applied pursuant to Vantage's General Permit to Discharge Stormwater under the Utah Pollutant Discharge Elimination System and accompanying Stormwater Pollution Prevention Plan.
- F) A "Closed Mud System" may be used if technically feasible and available at the time of drilling operations. If so, the reserve pit will be reduced in size.

#### 10) PIPELINES AND FLOWLINES

A separate Right-of-Way (ROW) application for the pipeline route will be submitted separately after consultation with the USFS.

#### 11) PLANS FOR RECLAMATION OF THE SURFACE:

- A) Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil will be deemed too wet.
- B) Earthwork for interim and final reclamation must be completed within six (6) months of well completion or plugging (weather permitting).
- C) In areas that will not be drill-seeded, the seed mix will be broadcast-seeded at twice the application rate shown and covered 0.25 to 0.5 inches deep with a harrow or drag bar or will be broadcast-seeded into imprints, such as fresh dozer cleat marks.

SURFACE USE PLAN OF OPERATIONS GDU 63-7-31

Page 6

- D) No seeding will occur from May 15 to September 15. Fall seeding is preferred and will be conducted after September 15 and prior to ground freezing. Spring seeding will be conducted after the frost leaves the ground and no later that May 15.
- E) Annual or noxious weeds shall be controlled on all disturbed areas as directed by the Field Office Manager. An intensive weed monitoring and control program will be implemented beginning the first growing season after interim and final reclamation. Noxious weeds that have been identified during monitoring will be promptly treated and controlled. A Pesticide Use Proposal (PUP) will be submitted to the USFS/BLM for approval prior to the use of herbicides. All reclamation equipment will be cleaned prior to use to reduce the potential for introduction of noxious weeds or other undesirable nonnative species. The operator will coordinate all weed and insect control measures with state and/or local management agencies.
- F) Reclaimed areas will be monitored annually. Actions will be taken to ensure that reclamation standards are met as quickly as reasonably practical.
- G) Reclamation monitoring will be documented in a reclamation report and submitted to the AO. The report will document compliance with all aspects of the reclamation objectives and standards, identify whether the reclamation objectives and standards are likely to be achieved in the near future without additional actions, and identify actions that have been or will be taken to meet the objectives and standards. The report will also include acreage figures for: Initial Disturbed Acres; Successful Interim Reclaimed Acres; Successful Final Reclaimed Acres. Reports will not be submitted for sites approved by the AO in writing as having met interim or final reclamation standards. Any time 30% or more of a reclaimed area is redisturbed, monitoring will be reinitiated.
- H) The AO will be informed when reclamation has been completed, is successful, and the site is ready for final inspection.

#### **INTERIM RESTORATION (Production)**

- A) Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut/fill slopes. These areas will be re-seeded.
- B) Wellpad size will be reduced to minimum size necessary to conduct safe operations. Cut/fills will be reduced to 3:1 or shallower.
- C) Reserve pits will be closed and backfilled as soon as the pit contents are dry enough to do so, or no later than the end of the next full summer following rig release, whichever comes first, to allow sufficient time for the pit contents to dry. Reserve pits remaining open after this period will require written authorization of the AO. Immediately upon well completion, any hydrocarbons or trash in the reserve and flare pits will be removed. Pits will be allowed to dry, be pumped dry, or solidified in-situ prior to backfilling.
- D) Following completion activities, pit liners will be removed or removed to the solids level and disposed of at an approved landfill, or treated to prevent their reemergence to the surface and interference with long-term successful revegetation. If it was necessary to line the pit with a synthetic liner, the pit will not be trenched (cut) or filled (squeezed) while containing fluids. When dry, the pit will be backfilled with a minimum of five (5) feet of soil material. In relatively flat areas, the pit area will be slightly mounded to allow for settling and to promote surface drainage away from the backfilled pit.
- E) The portions of the cleared well site not needed for operational and safety purposes will be recontoured to the original contour if feasible, or if not feasible, to an interim contour that

#### SURFACE USE PLAN OF OPERATIONS GDU 63-7-31

blends with the surrounding topography as much as possible. Sufficient level area will remain for setup of a workover rig and to park equipment. In some cases, rig anchors may need to be pulled and reset after recontouring to allow for maximum interim reclamation.

- F) Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including road cut/fills and to within a few feet of the production facilities, unless an all-weather, surfaced, access route or small "teardrop" turnaround is needed on the well pad.
- G) Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by USFS/BLM (shown below) to meet reclamation standards will be used. The seed mix will be used on all disturbed surfaces including pipelines and road cut/fill slopes.
- H) To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, debris, and rock over recontoured cut/fill slopes.
- I) A proposed seed mixture for this location is:

4.80#/acre PLS – Sand bluestem (Elida, Garden)

0.20#/acre PLS – Sand lovegrass (Bend)

1.35#/acre PLS – Switchgrass (Granvillo or Blackwolf)

1.30#/acre PLS – Prairie sandreed (Goshen)

1.60#/acre PLS – Western Wheatgrass (Arriba or Barton)

9.25#/acre PLS – TOTAL

- J) Reclamation will be considered successful if the following criteria are met:
  - · 70 percent of predisturbance cover
  - · 90 percent dominate species\*
  - · Erosion features equal to or less than surrounding area

The vegetation will consist of species included in the seed mix and/or occurring in the surrounding natural vegetation.

#### FINAL RESTORATION (P & A – Removal of equipment)

- A) Flowlines on location will be removed before site reclamation and all flowlines between the wellsite and production facilities will remain in place and will be filled with water.
- B) If necessary to ensure timely revegetation, the pad will be fenced to USFS standards to exclude livestock grazing for the first two growing seasons or until seeded species become firmly established, whichever comes later. Fencing will meet standards found on page 18 of the BLM Gold Book, 4<sup>th</sup> Edition, or will be fenced with operational electric fencing.
- C) Revegetation will be accomplished by planting mixed grasses as specified below. Revegetation is recommended for road area as well as around production site.
- D) A proposed seed mixture for this location is:

4.80#/acre PLS – Sand bluestem (Elida, Garden)

0.20#/acre PLS – Sand lovegrass (Bend)

1.35#/acre PLS – Switchgrass (Granvillo or Blackwolf)

1.30#/acre PLS – Prairie sandreed (Goshen)

1.60#/acre PLS – Western Wheatgrass (Arriba or Barton)

9.25#/acre PLS - TOTAL

#### SURFACE USE PLAN OF OPERATIONS GDU 63-7-31

Page 8

- E) Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by USFS (shown above) to meet reclamation standards will be used. The seed mix will be used on all disturbed surfaces including pipelines and road cut/fill slopes.
- F) Distribute topsoil, if any remains, evenly over the location, and seed according to the above seed mixture. If needed the access road and location shall be ripped or disked prior to seeding. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
- All disturbed areas, including roads, pipelines, pads, production facilities, and interim G) reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Resalvaged topsoil will be spread evenly over the entire disturbed site to ensure successful revegetation. To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, woody debris, and large rocks over recontoured cut/fill slopes.

#### 12) General Information

- A) Project area is situated in the undulated uplands of the western part of the Uintah Basin.
- B) Topographic and geologic features - moderate relief area, moderately drained, sand-clay deposition, surrounded by steep uplands with highly eroded drainages.
- Soil characteristics clay loam. C)
- D) Flora consists of: Piñon pine, Juniper, Sagebrush, and short grasses. Please refer to archaeological report and botany report to be included in the NEPA document.
- E) Fauna - none observed. Please refer to the wildlife report to be included in the NEPA document.
- F) Concurrent surface use - grazing and hunting.
- G) Mineral Lessor:

Bureau of Land Management, Vernal Field Office 170 South 500 East, Vernal, UT 84078

Phone: 435-781-4400; Fax: 435-781-4410

H) Surface Management Agency:

> U.S. Forest Service, Duchesne Ranger District 85 W. Main St., Duchesne, UT 84021

Phone: 435-738-2482; Fax: 435-781-5215

- I) Proximity of water, occupied dwellings or other features: un-named intermittent drainage  $\pm 300$ ' to the southeast; flowing into Gilsonite Draw.
- J) Archaeological, cultural and historical information for the new construction on federal lands will be submitted separately by Montgomery Archaeological Consultants.
- K) If any fossils are discovered during construction, the operator shall cease construction immediately and notify the AO so as to determine the significance of the discovery.
- L) A Class III (100% pedestrian) cultural resource inventory shall be completed prior to disturbance by a qualified professional archaeologist in the following areas: Well location. A report of the inventory will be submitted and approved by the BLM with stipulations as appropriate in order to comply with EO 11593 and Section 106 of the National Historic Preservation Act of 1966. See Section "General Information – K" above.

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#### SURFACE USE PLAN OF OPERATIONS GDU 63-7-31

- M) The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the AO. The AO will inform the operator as to the work needed to determine the following:
  - Whether the materials appear eligible for the National Register of Historic Places;
  - The mitigation measures the operator will likely have to undertake before the site can be used (assuming in site preservation is not necessary); and,
  - A timeframe for the AO to complete an expedited review to acquire the State Historic Preservation Officer's concurrence that the findings of the AO are correct and that mitigation is appropriate.
- N) Vantage maintains a file, per 29 CFR 1910.1200(g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous substances, EHS, and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

## Vantage Energy Uinta LLC GDU 63-7-31

SHL: 2,167' FSL 562' FWL (NW/4 SW/4)
BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4) within a 60' radius

Sec. 7 T6S R3W

Duchesne County, Utah Federal Lease: UTU78235

## APPLICATION FOR PERMIT TO DRILL OPERATOR CERTIFICATION

#### LESSEE'S OR OPERATOR'S REPRESENTATIVE:

Operator

Vantage Energy Uinta LLC 116 Inverness Drive East, Suite 107

Englewood, CO 80112 Phone: 303-386-8600

Mark Rothenberg – Senior Project Engineer John Moran – Senior Drilling Engineer Michael Holland – Senior Landman

Field Office:

Vantage Energy Uinta LLC 116 Inverness Drive East, Suite 107 Englewood, CO 80112

Phone: 303-386-8600

Banko Petroleum Management, Inc. 385 Inverness Parkway, Suite 420 Englewood, Colorado 80112-5849

Phone: 303-820-4480 Fax: 303-820-4124

- \*+ David Banko Consulting Petro Engineer david@banko1.com
- \*+Kimberly Rodell Regulatory Technician kim@banko1.com

Keith Dana – Range Mgmt. Consultant

Cell: 307-389-8227

krlcdana@fascination.com

- Contact to arrange onsite meeting.
- + For any questions or comments regarding this permit.

#### **OPERATOR CERTIFICATION:**

I hereby certify that Vantage Energy Uinta LLC and its contractors and sub-contractors are responsible for the operations conducted under this application subject to the terms and conditions of the mineral lease. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Vantage Energy Uinta LLC under their nationwide bond, BLM Bond No. UTB000288.

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

S:\Vantage Energy\Utah\GDU 63-7-31\GDU 63-7-31 APD-Dir.doc

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APD DISTRIBUTION PAGE

GDU 63-7-31

April 30, 2012

Kimberly J. Rodell
Permit Agent for Vantage Energy Uinta LLC

Vantage Energy Uinta LLC GDU 63-7-31

SHL: 2,167' FSL 562' FWL (NW/4 SW/4)

BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4) within a 60' radius

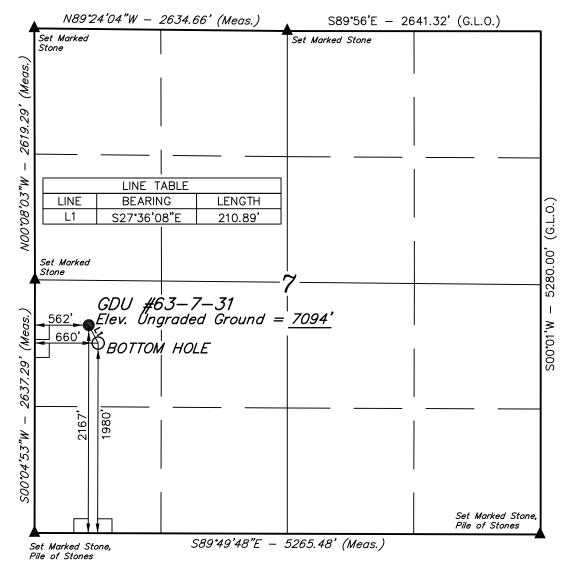
Sec.7 T6S R3W
Duchesne County, Utah
Federal Lease: UTU78235

Wells wtihin a 2 mile radius

						Surface					Township-						
API Well Number	Operator	Well Name	Well Status	Well Type	Field Name	Ownership	Mineral Lease	County	Qtr/Qtr	Section	Range)	Ft. NS	NS F	t. EW	EW Ele	ev. GR	ΓD
43-013-11008-00-00	DIAMOND SHAMROCK EXPL	PINON FED 1	Plugged and Abandoned	Dry Hole	UNDESIGNATED	Federal	Federal	DUCHESNE	NENW	5	6S-3W	584	N	2009	w		5979
43-013-11086-00-00	SINCLAIR OIL CORPORATION	GILSONITE DRAW 1	Plugged and Abandoned	Dry Hole	WILDCAT	Federal	Federal	DUCHESNE	NWNW	20	6S-3W	1120	N	1120	w	7059	10508
43-013-32939-00-00	EOG RESOURCES INC.	GILSONITE 1-20	Returned APD (Unapproved)	Gas Well	WILDCAT	Federal	Federal	DUCHESNE	NWNW	20	6S-3W	1205	N	1202	w	7062	
43-013-34037-00-00	VANTAGE ENERGY UINTA LLC	GILSONITE 1-20	Shut-In	Oil Well	WILDCAT	Federal	Federal	DUCHESNE	NWNW	20	6S-3W	1205	N	1202	w	7060	5975
43-013-34219-00-00	VANTAGE ENERGY UINTA LLC	GDU 63-7-31	Location Abandoned	Gas Well	WILDCAT	Federal	Federal	DUCHESNE	NWSW	7	6S-3W	2167	S	562	w	7094	
43-013-50660-00-00	VANTAGE ENERGY UINTA LLC	GDU 63-7-31	Approved permit (APD); not yet spudded	Gas Well	UNDESIGNATED	Federal	Federal	DUCHESNE	NWSW	7	6S-3W	2167	S	562	w	7094	
43-013-50897-00-00	VANTAGE ENERGY UINTA LLC	GDU 63-5-12	Approved permit (APD); not yet spudded	Gas Well	UNDESIGNATED	Federal	Federal	DUCHESNE	NENW	5	6S-3W	750	N	1804	w	6773	
43-013-50905-00-00	VANTAGE ENERGY UINTA LLC	GDU 63-6-23	Approved permit (APD); not yet spudded	Gas Well	UNDESIGNATED	Federal	Federal	DUCHESNE	SWNE	6	6S-3W	2418	N	2480	E	6965	
43-017-20350-00-00	BRYCE CANYON OIL CO	1	Plugged and Abandoned	Unknown	WILDCAT	Fee (Private)	Fee (Private)	GARFIELD	NENE	36	36S-3W	2640	N	2640	E	6000	400

Data taken from the Utah Department of Oil, Gas & Mining website on April 30, 2012.

### T6S, R3W, U.S.B.&M.



#### BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

#### LEGEND:

 $_{-}$  = 90° SYMBOL

= PROPOSED WELL HEAD.

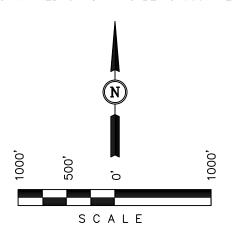
SECTION CORNERS LOCATED.

#### Vantage Energy Uinta LLC

Well location, GDU #63-7-31, located as shown in the SW 1/4 NW 1/4 of Section 7, T6S, R3W, U.S.B.&M., Duchesne County, Utah.

#### BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAN WAS PREPARED FREED NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO BEST OF MY KNOWLEDGE AND BELIEF NO. 161319

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF JAHTE OF

REVISED: 12-17-08 L.K.

#### Untah Engineering & Land Surveying 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017
| DATE SURVEYED:

SCALE

1" = 1000'

PARTY

M.A. A.H. S.L.

WEATHER

WARM

DATE SURVEYED:

11-06-08

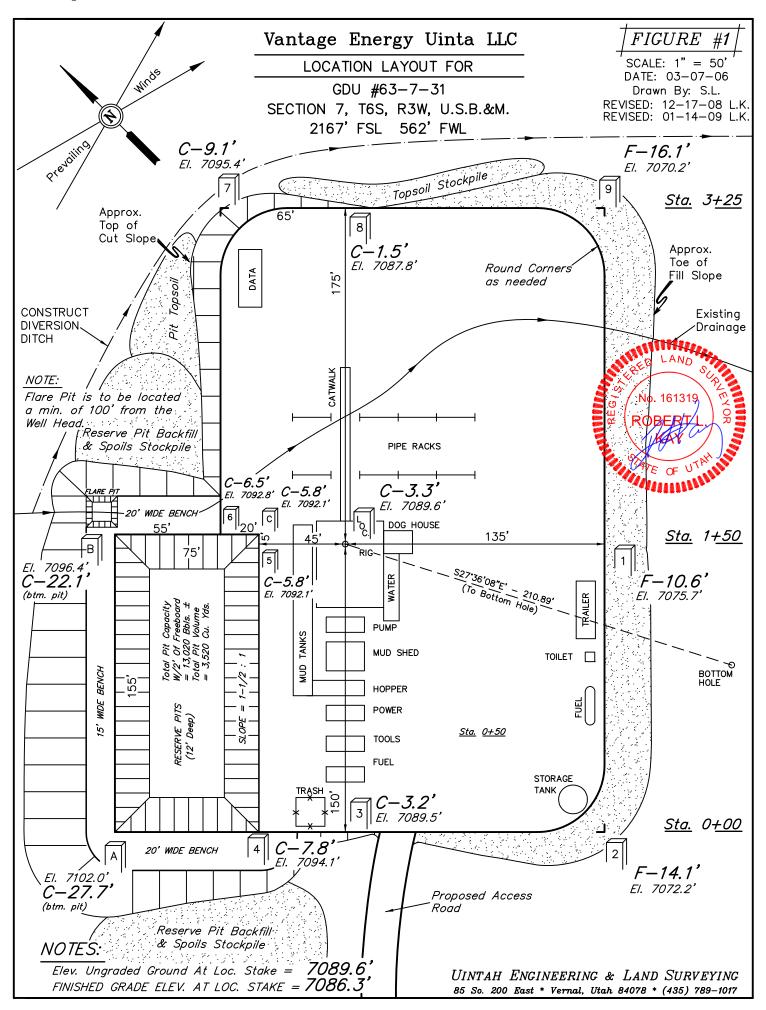
11-14-08

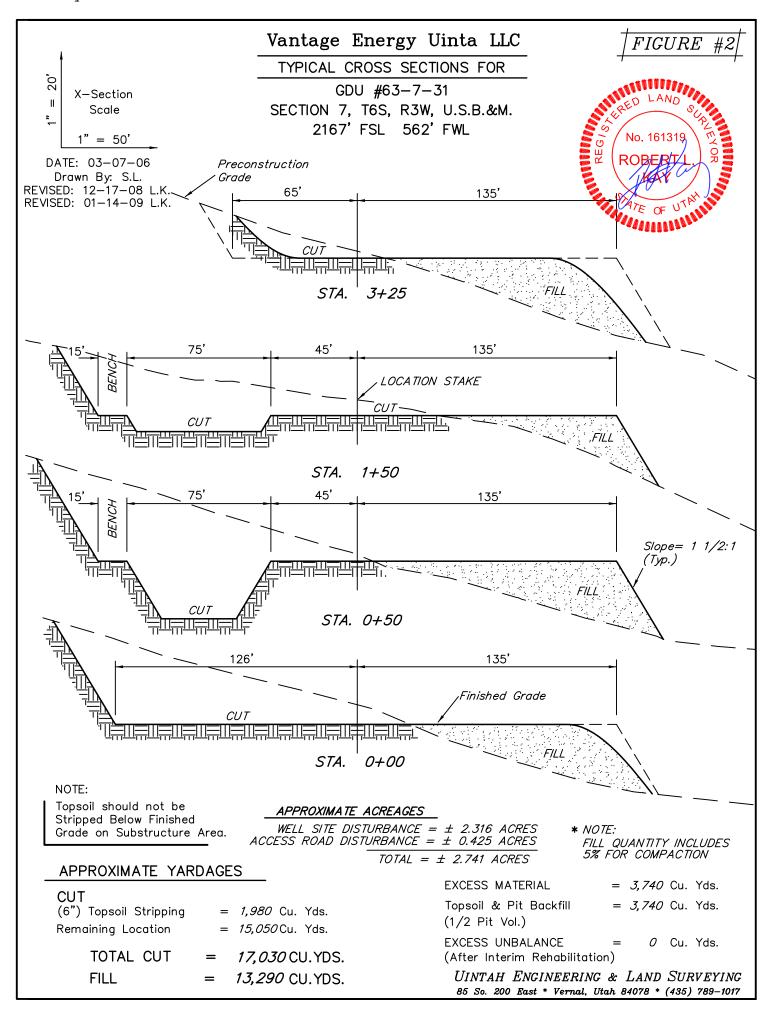
REFERENCES

G.L.O. PLAT

FILE

Vantage Energy Uinta LLC

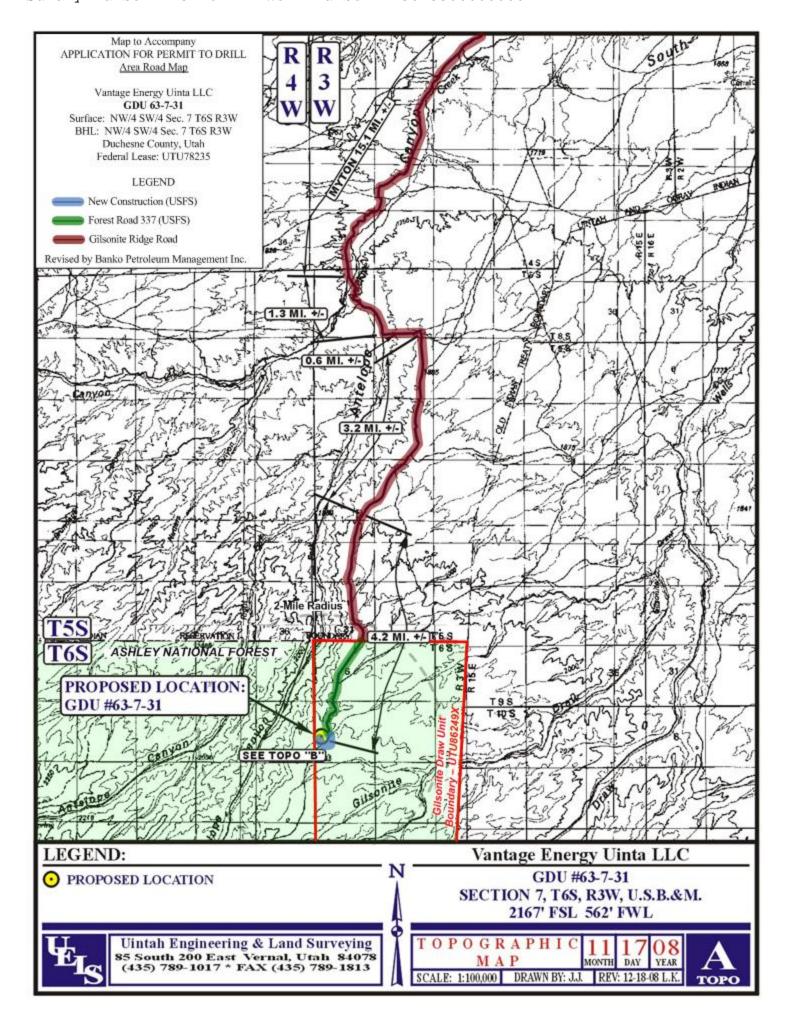


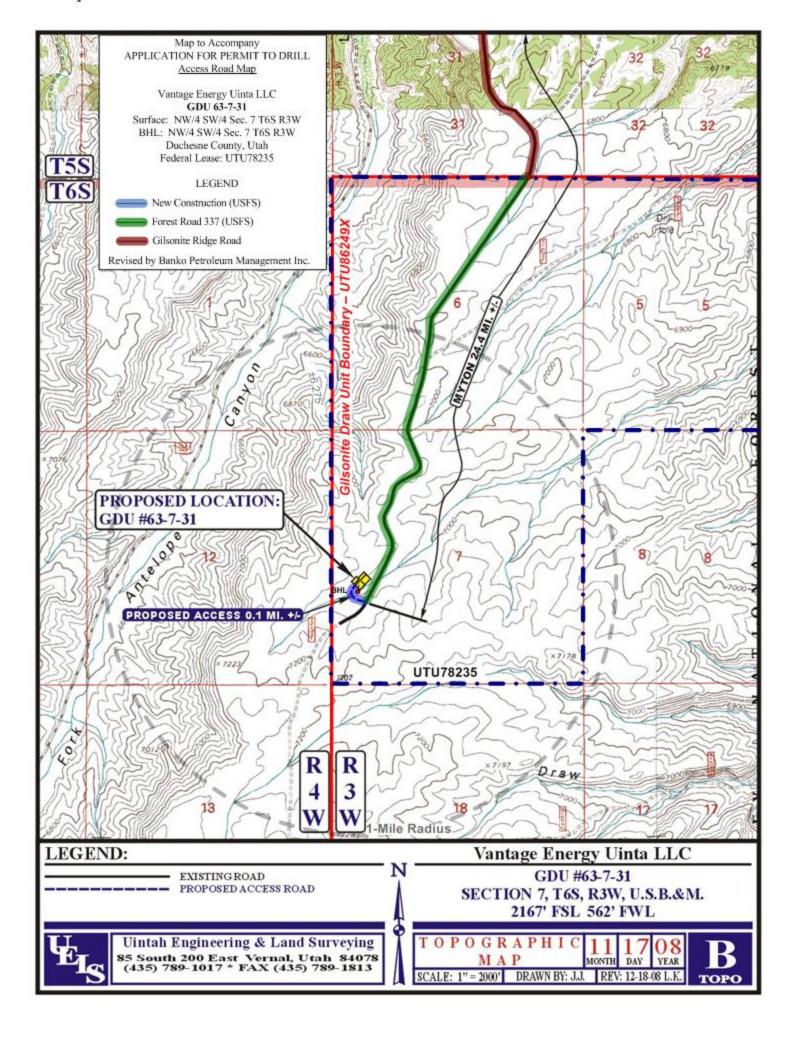


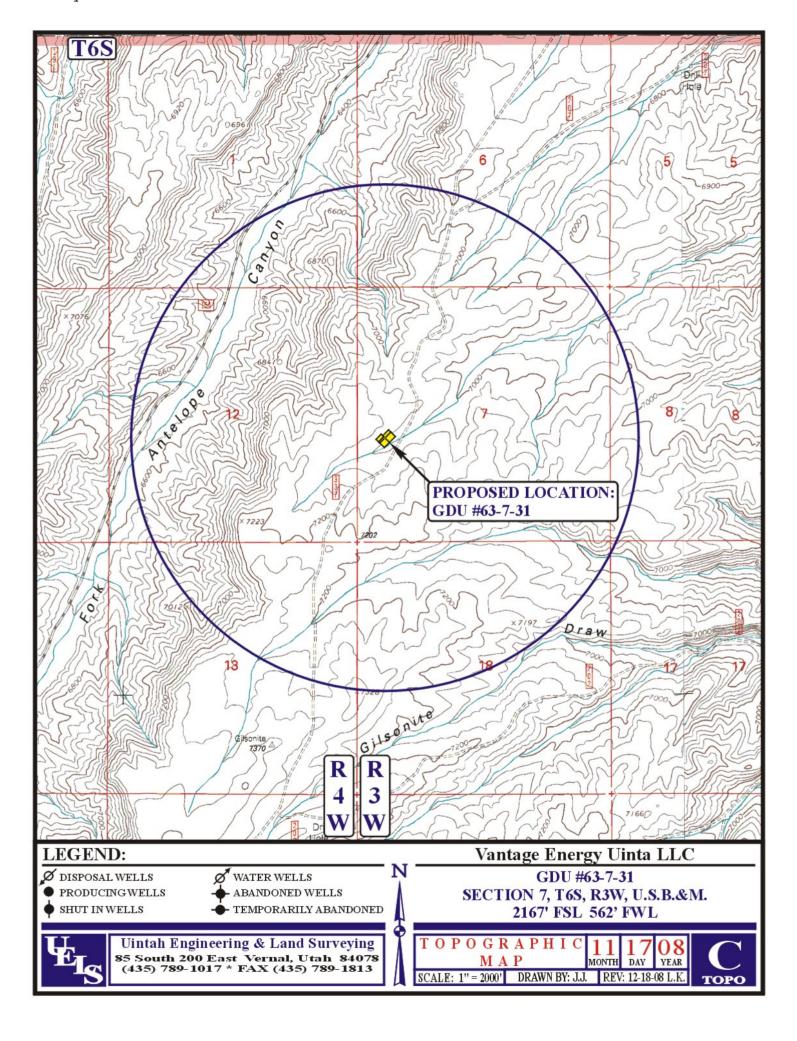
Sundry Number: 25216 API Well Number: 43013506600000 FIGURE #3 Vantage Energy Uinta LLC SCALE: 1" = 50'PRODUCTION FACILITY LAYOUT FOR DATE: 03-07-06 GDU #63-7-31 Drawn By: S.L. REVISED: 12-17-08 L.K. REVISED: 01-14-09 L.K. SECTION 7, T6S, R3W, U.S.B.&M. 2167' FSL 562' FWL COMBO UNIT Φ WELL HEAD Access Road

RE-HABED AREA

UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017







Form 3160-3 (August 2007)

RECEIVED AUG 1 3 2012 FEB 2 6 2009

## UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

i.	Lease Serial No.	
	UTU78235	

6. If Indian, Allottee or Tribe Name

DIV. OF OIL, GAS & MINING APPLICATION FOR PERMIT TO DRILL OR REENTER			6. If Indian, Allottee or Tribe Name		
1a. Type of work: XDRILL REENTER			7. If Unit or CA Agreement, Name and No. Gilsonite Draw Unit UTU86249X 8. Lease Name and Well No.		
1b. Type of Well Oil Well X Gas Well Other	X Single Zone Multiple Zo			63-7-31	
2. Name of Operator E-mail: mark.rothenberg@vantageenergy.com		om 9. API Wel	9. API Well No.		
Vantage Energy Uinta LLC Contact: Mark Rothenberg		43	43.013.50660		
3a. Address 116 Inverness Drive East, Suite 107	3b. Phone No. (include area code)		10. Field and Pool, or Exploratory		
Englewood CO 80112	303-386-8600	Wild	Wildcat		
4. Location of Well (Report location clearly and in accordance with any State Requir			11. Sec., T., R., M., or Blk. and Survey or Area		
At surface 2,167' FSL 562' FWL Lat: 39.973003	NW /4 SW /4 Long: 110.273014	Sec.	7 T 6S	R 3W	
At proposed production zone ±1,980' FSL ±660' FWL (NW/4 SW/4) of	of Sec. 7 T6S R3W		Meridian: U.S.B.&M.		
14. Distance in miles and direction from nearest town or post office. *		12. County	or parish	13. State	
/ell is ±33 miles southwest of Myton, Utah.		D	uchesne	Utah	
15. Distance from proposed location to nearest Unit= ±562' 16. No. of acres in lease 17. Sproperty or lease line, ft. (Also nearest Drig, unit		17. Spacing Unit de	acing Unit dedicated to this well		
line, if any)  Lease= ±562'	2250.48 40		)		
	Proposed depth	20. BLM/BIA Bond	LM/BIA Bond No. on file		
to nearest well, drilling, completed or applied for, on this lease, ft. $\pm 6,904$	12,115' TVD; 12,125' MD	UTB00028	JTB000288		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)  22. Approximate date work will start *		23. Estimat	23. Estimated duration		
7,094 ' GR	August 1, 2009		45–60 days drlg + completion		
24. Attachments					
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:					
Well plat certified by a registered surveyor.	4. Bond to cover the operations unless covered by an existing bond			disting bond	
2. A Drilling Plan.	on file (see Item 20 above).				
3. A Surface Use Plan (if the location is on National Forest System  Lands, the SUPO must be filed with the appropriate Forest  5. Operator certification.  6. Such other site specific			on and/or plane as m	av ho	
Lands, the SUPO must be filed with the appropriate Forest Service Office).  6. Such other site specific information and/or plans as may be required by the BLM.				ay be	
25. Signature	Name (Printed/Typed)		Date		
6197/2m	David F. Banko 303-820-448		February 25, 2009		
Title Permit Agent for: Vantage Energy Uinta LLC					
Approved by (Signature)	Name (Printed/Typed)	[	Date	_	
	Jerry Kenczk	a	JUL 3	1 2012	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval. If any are attached.

Office

Conditions of approval, if any, are attached.

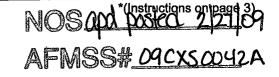
Aggletant Fletd Manager Lands & Mineral Resources

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

(continued on page 2)



**NOTICE OF APPROVAL** 



VERNAL FIELD OFFICE



# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL, UT 84078

(435) 781-4400



# CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No: API No: **Vantage Energy Uinta LLC** 

170 South 500 East

GDU 63-7-31

43-013-50660

Location: Lease No: **NWSW, Sec. 7, T6S, R3W** 

UTU-78235

Agreement: Gilsonite Draw Unit

**BLM OFFICE NUMBER: (435) 781-4400** 

Forest Service Number: (435) 790-3924

BLM OFFICE FAX NO.: (435) 781-3420

Forest Service Fax No.: (435) 781-5215

# A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

# NOTIFICATION REQUIREMENTS

Location Construction (Notify Forest Service Environmental Scientist Sherry Fountain)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Forest Service Environmental Scientist Sherry Fountain)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <u>blm_ut_vn_opreport@blm.gov</u>
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 9 Well: GDU 63-7-31 7/24/2012

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

Well Number: GDU 63-7-31 (all USFS surface)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.

# **Additional Conditions of Approval:**

Vantage 2011 CE Project - Required Mitigations and Design Elements Compiled by David Herron (USFS), June 26, 2012

As part of the approval decision for the Vantage 2011 CE Project, the following mitigations and conditions of approval are being required. These conditions are in addition to the design elements and mitigations already incorporated within lease stipulations, and within the Surface Use Plan of Operations affected by the decision for this project.

#### General

- Production equipment will be painted to better blend-in with the surrounding area. The specific color for each well site to be determined and provided by the Forest Service.
- Wells Final reclamation will occur after a well is no longer productive. Each well will be plugged, capped, and all surface equipment (including surface pipelines) will be removed at the end of its productive life.
- When no longer needed for project-related activities, each well pad will be recontoured to mimic the adjacent natural topography using heavy equipment, and previously salvaged soil material would be spread over the surface of the pad site. The reclaimed surface will then be reseeded with vegetation (seed mix would be determined by the Forest Service) and will generally mimic native vegetation surrounding the specific well site. Sufficient erosion control is assured when adequate groundcover is reestablished, water naturally infiltrates into the soil, and gullying, head-cutting, slumping, and deep or excessive rilling are not observed.
- Consider use of closed loop drilling systems, to eliminate the need for reserve pits, reduce closure and waste management costs, and reduce potential for contamination from leaking.

Page 3 of 9 Well: GDU 63-7-31 7/24/2012

#### Wildlife

• No drilling activities would occur between November 15 and April 1, to protect elk during the critical winter period.

- Netting will be placed over reserve pits, and reserve pit areas will be fenced, to minimize impacts to birds, bats, and other wildlife.
- Pump jacks will be equipped with high grade mufflers, to reduce noise impacts to wildlife and Forest visitors.

# Air Quality

- The Operator will use drill rigs that meet EPA Tier II emission standards or better.
- The Operator will install pump jack engines that meet the applicable New Source Performance Standards (NSPS) emission limits for pump jack engines.
- Reduce fugitive dust from roads by observing speed limits, and applying water to the roads as needed.
  Water for this purpose will be fresh water, not production water from oil and gas wells. If water
  application does not adequately reduce fugitive dust, the use of magnesium chloride (MgCl) or other
  dust suppression methods would be considered; however, MgCl should not be applied within 100 feet of
  perennial streams, wetlands, springs, wet areas, or ambient water.

#### Soil and Water Resources

- To prevent erosion of disturbed soils, vegetation and/or structural measures to control erosion will be implemented as soon as possible after initial soil disturbance.
- The Operator will promptly revegetate all disturbed areas not necessary for future operations, including well pad fill slopes, with a Forest Service-approved seed mixture. Revegetation would commence immediately after construction, or immediately after the disturbed area is reclaimed or no longer needed for future operations.
- Engineering practices will be implemented as needed to control erosion from disturbed surfaces. Such engineering measures may include straw bales, silt fences, mulching, use of fiber mats, cross slope trenching, contour furrows, rock dams, terracing, or other erosion control practices as deemed necessary by the Forest Service.
- Reserve pits will be lined with a 20-mil pit liner on top of a protective felt layer to minimize the potential for leaks of pit fluids.

Page 4 of 9 Well: GDU 63-7-31 7/24/2012

# Roads and Pipelines

- Placement of gas pipelines will be coordinated with Forest Service cultural resources staff, before placement occurs, to ensure that pipeline routes do not impact cultural resource sites.
- Gas gathering pipelines will be located in the 35-foot right-of-way along access roads, except as needed on a site-specific basis to resolve safety concerns, or to comply with other resource mitigation measures.
- All roads constructed by the Operator will be closed to public motorized use through the use of Forest Service approved signs and gates.
- Road drainage crossings will be of the typical dry creek drainage crossing type. Crossings will be
  designed so they would not cause headcutting, siltation, or accumulation of debris in the channel, and so
  drainages will not be blocked by the roadbed. Open/low water crossings may require improvement by
  hardening with rock base. Where culvert crossings are deemed necessary, culverts would be sized
  according to Forest Service engineer and hydrologist direction.
- All new and existing access roads associated with this project will be maintained and kept in good repair during drilling, completion, and producing operations. Road maintenance will include grading, maintaining drainage, watering (as needed), fixing mud holes, cleaning cattle guards, snow removal, sign maintenance (for signs associated with oil and gas wells or development), etc. Snow removal will be done in a manner approved by the Forest Service in order to reduce road surface loss and erosion.
- New road construction will be the minimum necessary for safely conducting the approved activity.
   When no longer required for this project, new roads will be closed by re-contouring to match local topography, scarification and reseeding.
- New access roads and surface-disturbing activities will conform to the BLM Gold Book (BLM 2007) standards and/or Forest Service specifications.
- Graveling or capping the roadbed will be performed as necessary to provide a well-constructed, safe road.
- Appropriate water control structures for roads will be installed to control erosion.
- Contractors and employees are required to comply with all posted speed limits.
- All construction/operations traffic and vehicles will be confined to the approved road ROW and any additional areas as specified in an approved APD. No cross-country travel by vehicles will be allowed.

#### Range

• Fence well pads, as needed and as determined by the Forest Service, to prevent cattle from entering well pad areas.

Page 5 of 9 Well: GDU 63-7-31 7/24/2012

- Fences and cattle guards damaged by project-related equipment or vehicles will be promptly repaired.
- Construction vehicles and equipment will be cleaned, power-washed, and free of soil and vegetation debris prior to entry and use of access roads to prevent transporting weed seeds.
- All seed mixtures, erosion control materials, and reclamation materials will be certified weed free.
- The Operator will implement a weed control program to identify and control weeds within and adjacent to project-related road sand facilities. The Operator will reseed all portions of well pads and disturbed road and pipeline ROWs not utilized for the operational phase of the project. Reseeding will be accomplished using a Forest Service approved seed mixture. Post-construction seeding applications will continue until determined successful by the Forest Service. Weed control will be conducted through an approved Pesticide Use and Weed Control Plan. Weed monitoring and reclamation measures will be continued on an annual basis (or as frequently as the AO determines) throughout the LOP. Herbicides shall be selected from those approved for use on the ANF.

#### **Cultural Resources**

- All personnel, subcontractors, and consultants associated with the project will refrain from collecting, damaging, or impacting cultural resources on the Forest.
- If cultural resources are inadvertently discovered, construction activities will be halted within 100 feet of the discovery and the Forest Service notified. Operations in the area of the discovery will not resume authorization to proceed has been received from the Forest Service.

#### Paleontological Resources

- Paleontological monitoring of surface-disturbing activities (road and well pad construction) will be required for these sites. Paleontological monitoring may involve concurrent observation of all construction activities within a given construction area, or may consist of periodic spot-checking and salvage of observed fossil resources, as determined by the Forest Service on a case-by-case basis.
- Any significant fossils identified during paleontological surveys or monitoring efforts will be collected by a qualified paleontologist, properly documented, and transferred to a Forest Service-approved paleontological repository for curation.
- If significant paleontological resources are discovered, construction activities would be halted and the Forest Service notified. Ground disturbing operations in the area of the discovery would not resume until authorization to proceed has been received from the Forest Service.

(end of document)

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# DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

# SITE SPECIFIC DOWNHOLE COAs:

Site Specific Drilling Plan COAs:

. ...

- 5000 psi BOPE shall be used to control the well while drilling from the surface casing shoe to TD. All BOPE shall conform to requirements set forth in OO#2 for 5M BOPE systems.
- The production casing cement shall extend a minimum of 200 feet above the surface casing shoe.
- A formation integrity test shall be performed at the surface casing shoe.
- Electronic/mechanical mud monitoring equipment shall be required, from surface casing shoe to TD, which shall include as a minimum: pit volume totalizer (PVT); stroke counter; and flow sensor.

#### Variances Granted:

Air Drilling:

- Properly lubricated and maintained rotating head, variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head.
- Blooie line discharge 100' from the well bore, variance granted for blooie line discharge to be 35' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for two truck/trailer mounted air compressors.
- Automatic igniter. Variance granted for igniter due to there being no productive formations while drilling with air.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- <u>Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.</u>
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

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All BOPE components shall be inspected daily and those inspections shall be recorded in the daily
drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order
No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a
test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's
log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
  encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
  Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

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#### **OPERATING REQUIREMENT REMINDERS:**

. . . . .

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at <a href="https://www.ONRR.gov">www.ONRR.gov</a>.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - Operator name, address, and telephone number.
  - o Well name and number.
  - o Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

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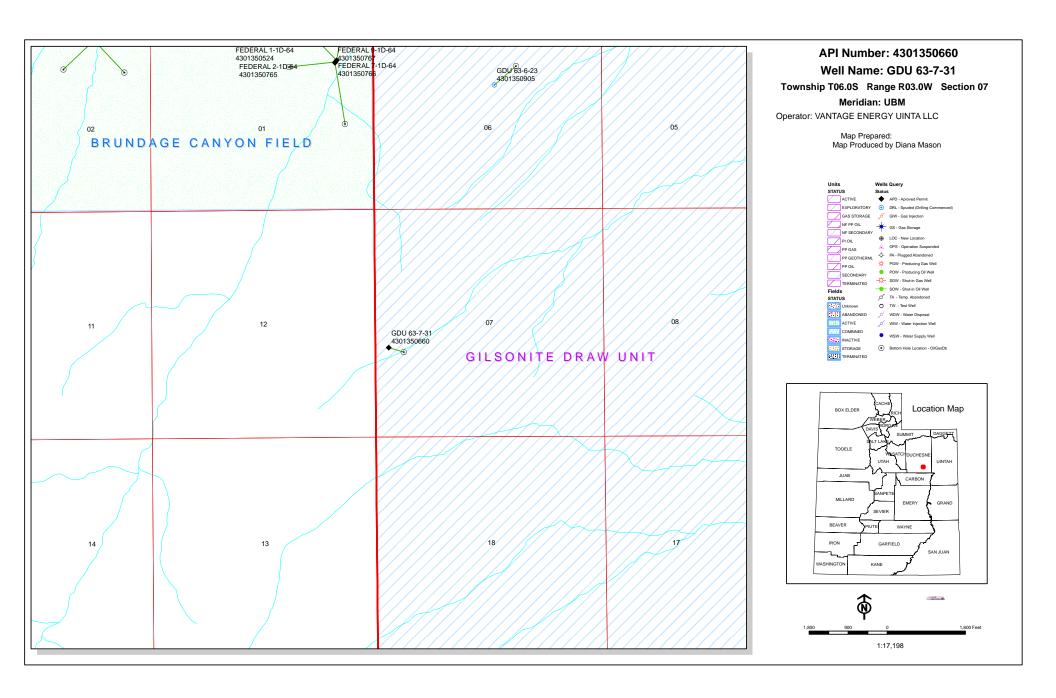
7/24/2012

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering
  lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a
  suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be
  obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

# Sundry Number: 29068 API Well Number: 43013506600000 FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

	STATE OF UTAH		FORM 9		
1	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN	=	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU78235		
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	posals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.	deepen existing wells below ntal laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: GILSONITE DRAW		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: GDU 63-7-31		
2. NAME OF OPERATOR: VANTAGE ENERGY UINTA LI	LC		<b>9. API NUMBER:</b> 43013506600000		
3. ADDRESS OF OPERATOR: 116 Inverness Drive East, S	Ste 107 , Englewood , CO, 80112	PHONE NUMBER: 303 386-8600 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2090 FSL 0313 FWL			COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNSH	tip, RANGE, MERIDIAN: 07 Township: 06.0S Range: 03.0W Mei	ridian: U	STATE: UTAH		
11. CHECI	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
8/20/2012	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION		
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON		
	L TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION		
,	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Vantage Energy Uinta LLC (Vantage) is submitting this Sundry Notice to notify the Utah Division of Oil, Gas and Mining that the above referenced well has been moved per the request of the United States Forest Service. Due to the location change the filing includes the following attachment: a revised Drilling Program, a revised Surface Use Plan of Operations, and revised plats. Please contact the undersigned with any questions. Thank you.  By:  By:  Approved by the Utah Division of Oil, Gas and Mining  Utah Division of Oil, Gas and Mining  Date:  August 28, 2012  By:  By:  By:  By:  By:  By:  By:  By					
NAME (PLEASE PRINT) David F. Banko	PHONE NUMB	ER TITLE Permit Agent			
SIGNATURE	303 820-4480	DATE			
N/A		8/17/2012			



# Vantage Energy Uinta LLC GDU 63-7-31 API No. 43-013-50660

SHL: 2,090' FSL 313' FWL (NW/4 SW/4)

BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4) within a 60' radius

Sec. 7 T6S R3W Duchesne County, Utah Federal Lease: UTU78235

Gilsonite Draw Federal Unit: UTU86249X

# NINE POINT DRILLING PROGRAM Revised August 17, 2012

(All drilling procedures will comply with BLM Onshore Oil and Gas Orders 1 and 2)

Vantage Energy Uinta LLC respectfully requests that all information regarding this well be kept CONFIDENTIAL.

#### a) GEOLOGIC MARKERS

Anticipated tops of geologic markers are indicated in **Table 1** 

**Table 1 Estimated Tops of Geologic Markers** 

Formation	Vertical Depth	Measured Depth	Description
Green River	Surface	Surface	Sandstone/siltstone/shale
Garden Gulch	3,384'	3,400'	Sand and Siltstone
Douglas Creek	4,279'	4,300'	Sandstone/siltstone/shale
Castle Peak	5,279'	5,300'	Sandstone/siltstone/shale
Uteland Butte	5,679'	5,700'	Carbonate/shale/sandstone
Wasatch	5,879'	5,900'	Shale/Sandstone
Total Depth	5,980'	6,001'	TD +/ 150' into Wasatch

Surface Elevation: 7,099' (Ungraded Ground); 7,097' (Est. KB).

Proposed Total Vertical Depth: 5,980' Proposed Total Measured Depth: 6,001'

# b) DEPTHS OF WATER AND MINERAL-BEARING ZONES

Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicated no permitted water wells within three miles of the proposed location. Utah Division of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

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DRILLING PROGRAM **GDU 63-7-31 API No. 43-013-50660** Revised August 17, 2012

**Table 2: Principal Anticipated Water and Mineral-bearing Zones** 

Formation	Vertical Depth	Measured Depth	<b>Potential Contents</b>
Green River	Surface	Surface	Water
Garden Gulch	3,384'	3,400'	Oil/Gas
Douglas Creek	4,279'	4,300'	Oil/Gas
Castle Peak	5,279'	5,300'	Oil/Gas
Uteland Butte	5,679'	5,700'	Oil/Gas
Wasatch	5,879'	5,900'	Oil/Gas

#### c) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

The maximum anticipated surface pressure for this well is calculated to be **1,364 psi**. Therefore, rules for a 2,000 psi rated BOP and choke manifold system are applicable. However, the typical rig inventory will consist of a 3,000 psi rated BOP and choke manifold. As such, the rig's BOP and choke manifold equipment will be tested to the standards for a 2,000 psi BOP system. A diagram of the proposed 2,000 psi rated BOP stack configuration is shown in **Fig. 1**.

BOPs and choke manifold will be installed and pressure tested before drilling out from under surface casing (subsequent pressure tests will be performed whenever pressure seals are broken) and then will be checked daily as to mechanical operating condition. BOPs will be pressure tested at least once every 30 days. The annular preventer, pipe rams, and blind rams will be activated on each trip and Operator will conduct weekly BOP drills with the rig crew. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

Ram type preventers and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. **Please see variance request at end of program for this section.** 

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22psi/ft or 1,500psi, whichever is greater, not to exceed 70% of internal yield. **Please see variance request at end of program for this section.** 

# Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2* for 2,000 psi systems. Irregardless of the rig selected, the rig's accumulator system shall have sufficient capacity to close all BOP equipment and retain 200 psi above precharge pressure. The proposed pressure control equipment will meet or exceed standards specified in the Order.

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#### d) CASING PROGRAM

Casing of quality equal to or better than that indicated in **Tables 3** and **4** will be used for this well. Actual casing used will be dependent on availability.

**Table 3 Proposed Casing Program** 

Depth (MD)	Hole Diameter	<b>Casing Diameter</b>	Casing Weight and Grade
$0 - \pm 40'$	20"	14"	Optional Conductor - Only if Required
0 – 500'	12 1/4"	8 5/8"	24# J55 ST&C, API New Pipe
0 – 6,001'	7 7/8"	5 1/2"	15.5# K55 LT&C, API New Pipe

**Table 4: Proposed Casing Specifications and Design Safety Factors** 

Size	Collapse (psi)	Burst (psi)	Body Strength (1,000 lbs.)	Joint Strength (1,000 lbs.)	Thread	*	Safety Facto	ors
						Burst	Collapse	Tension
						Design	Design	Design
						(1.2)	(1.0)	(1.4)
14"	NA – 0.219" wall structural and to seal shallow gravels to allow air drilling surface hole				Weld	NA	NA	NA
8 5/8" 24# J55	1,370	2,950	381	244	ST&C	1.96	5.55	4.26
5 1/2" 15.5# J55	4,040	4,810	248	217	LT&C	1.25	1.48	1.62

<sup>\*</sup>Safety Factor Calculation Assumptions:

#### **Surface Casing:**

**Burst Load:** Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required casing test pressure.

#### **MASP**

```
Load = (Formation Gradient -0.22 \text{ psi/ft}) * Total Depth, TVD
= (0.44 \text{ psi/ft} - 0.22 \text{ psi/ft}) * 5,980 ft.
= 1,316 psi
```

# TEST PRESSURE

Load = Greater of 1,500 psig or 0.22 psi/ft \* 500 ft = 110 psig Load = Greatter of 1,500 psig or 1,364 psig or 110 psig SF Burst = 2,950 psi / 1,500 psi = 1.96

**Collapse Load:** Assumes worse case loading of evacuated casing during cementing process.

Cement density = 15.8 ppg Load = 15.8 ppg \* 0.052 \* 500 ft = 410.8 psi SF Collapse = 1370 psi / 410 psi = 3.33

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```
Tension Load: Assumes air weight at total depth + 50,000 lbs overpull design factor.

Load = (24 lbs/ft * 500 ft) + 50,000 lbs overpull
= 62,000 lbs

SF Tension = 244,000 lbs / 62,000 lbs = 43.94
```

Test Pressure =

#### **Production Casing**

**Burst Load:** Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

```
Load = 4810 psi * 0.80
= 3848 psi
SF Burst = 4810 psi / 3848 psi = 1.25
```

**Collapse Load:** Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

```
Load = 0.44 psi/ft * 5,980 ft
= 2631 psi
SF Collapse = 4040 psi / 2631 psi = 1.53
```

**Tension Load:** Assumes buoyed weight of casing at total depth + 50,000 lbs overpull design factor.

```
Load = [15.5 lbs/ft * 6,001 ft* ((65.5 – 9.0) / 65.5)] + 50,000 lbs
= 129,994 lbs + 50,000 lbs
= 179,994 lbs

SF Tension = 217,000 lbs / 179,994 lbs = 1.62
```

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# e) **CEMENT PROGRAM**

Measured Depth	Hole Diameter	Casing Diameter	Cement
0' - ± 40'	20"	14"	Optional structural conductor if required: Grout with approximately 3.5 cubic yards of redi-mix back to surface (includes 100% excess)  TOC: Surface (Top-off per visual observation)
0' – 500'	12 1/4"	8 5/8"	Single Slurry System (300' – Surface) + 40' Shoe  Joint  225 sks Class G + 2% CaCl <sub>2</sub> + ½ lb/sk celloflake.  Density: 15.8 ppg Yield: 1.17 cuft/sk Water: 5.0 gal/sk Excess = 100% in open hole  TOC: Surface (Top-off per visual observation)
0' - 6,001'	7 7/8"	5 1/2"	Lead System (4,000' - 2,000')  129 sks Premium Lite II + 10% Gel + 10 lbs/sk gilsonite + 3% KCL +0.5% Sodium Metasillicate + 5 lbs/sk CSE-2 + ½ lb/sk celloflake + 3 lbs/sk Kol Sea + 0.5 lbs/sk Static Free + 0.002 gps FP-6L  Density: 11.0 ppg Yield: 3.50 cuft/sk Water: 21.4 gal/sk *Excess: 30%  Tail System (6,001' - 4,000') + 40' Shoe Joint 413 sks 50:50 (Class G:Poz) + 2% gel + 3% KCL + 0.5% EC-1 + 0.15% R-3 + 0.3% Sodium Metasillicat + ½ lb/sk celloflake + 0.05 lbs/sk Static Free + 0.002 gps FP-6L  Density: 14.4 ppg Yield: 1.25 cuft/sk Water: 5.48 gal/sk *Excess: 30%

<sup>\*</sup>Note: The production hole cement volume excess factor will be adjusted on location by the caliper  $\log$ , and will be re-calculated using caliper volume + 10% excess factor.

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#### f) MUD PROGRAM

The mud program for the proposed well is indicated in **Table 6.** 

**Table 6 Proposed Mud Program** 

Interval (feet)	Mud Weight (lbs/gallon)	· ·		Mud Type		
$0 - \pm 40$	NA	NA	NA	NA		
	Set optional 14" conductor with bucket rig					
40' - 500'±	NA	NA	N/C	Air/Mist		
	Run/cement 8 5/8" surface casing					
500'± - 3,500'	8.3 - 8.9	28 - 48	10 - 18	FW / PHPA		
3,500' - TD	8.4 - 8.9	34 – 58	8 - 10	3% KCL / PHPA		
	Run Logs – Run/cement 5 1/2" production casing					

Surface Hole Comments: Spud with "spudder rig" and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. <u>Please see</u> <u>variance requests for this section.</u>

Production Hole Comments: Drill out surface casing with fresh water using pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,500' "mud up" and "close in" the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and control lost circulation zones that may be encountered. Monitoring equipment will be installed on site to detect changes in mud volume.

# g) LOGGING, CORING, AND TESTING PROGRAM

The proposed logging program is indicated in **Table 7**.

**Table 7 Proposed Logging Program** 

Log Suites	Depth Range	Remarks
DIL-SP-LD-CN	Surface Casing to TD	Standard "triple combo" equivalent with resistivity-spontaneous potential, litho-density, compensated neutron, gamma ray, and caliper Will pull GR to surface
Dipole Sonic	$\pm 4,000$ ° to TD	Optional – Operator's discretion Rock property data
Rotary Sidewall Cores	± 4,000' to TD	Optional – Operator's discretion PP/Lithology data (perm-porosity)

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the Douglas Creek through total depth. Cuttings will be sampled every 20-30 feet.

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Prospective zones from the Douglas Creek formation through total depth will be perforated, tested, and potentially acid-washed. It is anticipated that multi-stage hydraulic fracture stimulations of the reservoir will be required.

# h) ANTICIPATED PRESSURES AND HAZARDS

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.44 psi/ft, and then transition to slightly over pressure in the Price River sequence.

Estimated BHP Douglas Creek (4,260')

Estimated BHP Wasatch (5,830')

Estimated BHP Total Depth (5,980')

Hydrostatic head of gas/mud column

1,874 psi
2,565 psi
2,631 psi
0.22 psi/ft.

**Maximum design surface pressure** 0.44 - 0.22 psi/ft x 5,980 ft = 1,316 psi

No H2S zones are anticipated. Lost circulation can be encountered. A variety of sized lost circulation materials will be maintained on location in the event lost circulation is experienced. No abnormal lost circulation zones are anticipated. The proposed well is a southern extension test of producing wells in T5S-R3W. Abnormal pressures will not be experienced to the proposed depth in this area.

#### i) DIRECTIONAL PROGRAM

This is a directional well. Please see the attached directional profile prepared by Multi-Shot LLC.

# j) OTHER INFORMATION

Contact Information and Personnel
Mailing Address
Vantage Energy Uinta LLC
116 Inverness Drive, Suite 107
Englewood, CO 80112

Main Number: 303-386-8600 Fax Number: 303-386-8700

<u>Drilling Operations: John Moran</u> Office Direct: 303-386-8610 Fax Direct: 303-386-8710 Mobile: 303-249-2234

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# START DATE AND DURATION OF ACTIVITIES

#### Anticipated start date

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about August 1, 2012, with a target spud date of August 15, 2015. It is anticipated the drilling phase will require 25 days.

#### Completion

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 - 60 days.

The total project duration is therefore estimated to be <u>70 - 85 days</u>, and therefore anticipated to be concluded on or about November 10, 2012.

A string of 2 7/8 inch 6.5 lb/ft. J-55 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

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#### **VARIANCE REQUESTS**

- 1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item B, No. 1h*, regulations requiring the surface casing be tested to the greater of 1500 psig, or 70% of the minimum internal yield.
  - a. The MASP for this well is calculated to be 1,364 psig, while the 70% yield rating is 2,065 psig.
  - b. Operator therefore requests approval to test the surface casing to the lesser value of 1,500 psig which is greater than the MASP value.
- 2. Operator requests a variance to *Onshore Oil and Gas Order 2, Item A*, regulations which outline test pressures for 3M pressure control systems.
  - a. The drilling contractor's standard inventory will consist of 3M pressure control systems; however, as cited above, the MASP for this well is calculated to be 1,364 psig. As such, 2M pressure control equipment is sufficient for the drilling of this well.
  - b. Operator therefore requests approval to test contractor's 3M BOPE to 2M pressure system standards. The double ram preventer will be tested to 2,000 psig, and the annular preventer will be tested to 1,500 psig. Safety valves and choke/kill valves and lines will all be tested to 2,000 psig.
- 3. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to drill only the surface hole to a depth of 350', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the following equipment shall be in place and operational during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located...a minimum of 100 feet (100') from the wellbore".
  - a. Operator requests approval to use a diverter bowl rather than a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 300'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
  - b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
  - c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.

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Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

# Vantage Energy Uinta LLC GDU 63-7-31 API No. 43-013-50660

SHL: 2,090' FSL 313' FWL (NW/4 SW/4)
BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4) within a 60' radius
Sec. 7 T6S R3W
Duchesne County, Utah
Federal Lease: UTU78235
Gilsonite Draw Federal Unit: UTU86249X

# SURFACE USE PLAN OF OPERATIONS Revised August 17, 2012

Vantage Energy Uinta LLC respectfully requests that all information regarding this well be kept CONFIDENTIAL.

# WELL LOCATION AND INTRODUCTION

The wellsite was surveyed and staked at 2,090' FSL 313' FWL (NW/4 SW/4) of Sec. 7 T6S R3W on June 8, 2012, by Uintah Engineering and Land Surveying, in the Ashley National Forest and a site that was geologically and topographically acceptable. The wellsite and access road fall within the boundary of the Gilsonite Draw Unit identified by Serial Register No. UTU86249X.

#### DIRECTIONS TO LOCATION:

From the intersection of State Highway 40 and Antelope Canyon Road southeast of Bridgeland, Utah, travel south/southwesterly  $\pm 3.3$  miles to an existing gravel resource road. Turn left and travel easterly for  $\pm 1.4$  miles to a "Y" intersection. Turn right on Gilsonite Ridge Road, which becomes the National Forest Road (FR) 337 at the Ashley National Forest boundary, and travel southerly for  $\pm 9.5$  miles to the staked proposed access road. Turn right and travel westerly, then northerly on the staked access road for  $\pm 0.2$  miles to the proposed location.

#### 1) <u>EXISTING ROADS</u>

This APD will serve as a request for USFS/BLM to initiate a Right-of-Way (ROW) application for access roads and water haul routes, if necessary. This ROW can continue up to the wellhead. Width of ROW requested is 40 feet.

The well is an exploratory well.

- A) Existing roads with 2.00 miles consist of a maintained dirt and gravel surfaced road forest road within 0.10 miles of the location, which will provide access to the proposed location.
- B) The existing road will be upgraded to the minimum degree necessary. Upgrading may include ditching, drainage, graveling, crowning, capping the roadbed as necessary to provide a well constructed and safe road; however, because this is an exploratory well, improvements to the access road will consist of the minimum construction needed for safe travel. Prior to any upgrading, the road will be cleared of any snow cover and allowed to dry completely. Upgrading will not be allowed during muddy conditions. Should mud holes develop, they will be filled in and detours around them avoided.
- C) The existing roads will be maintained and repaired as necessary.

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# 2) PLANNED ACCESS ROADS

This APD will serve as a request for USFS/BLM to initiate a ROW application for access roads and water haul routes. Please contact us if authorized federal access ROW to this location is not in order, or if USFS/BLM has additional requirements.

0.2 miles – Total new road construction, Sec. 7 T6S R3W – USFS, on lease, in unit.

- A) Running surface width to be  $\pm 14^{\circ}$   $\pm 16^{\circ}$ , total disturbed width to be no more than 40°. Plans for improvement and/or maintenance of existing roads are to maintain in as good or better conditions that at present. A regular maintenance plan will include, but not be limited to blading, ditching, and surfacing.
- B) Borrow ditches to be backsloped 3:1 or shallower. Weather permitting, the access road will be mowed and the borrow ditch material will be pulled over the top of the mowed area.
- C) Maximum grade will not exceed BLM standards.
- D) No culverts are anticipated.
- E) Surfacing material, if necessary, to consist of native material from borrow ditches, topsoil will be buried in road crown.
- F) No major road cuts are necessary.
- G) Fence cuts, gates, and cattleguards will not be required.
- H) Road construction on public lands shall meet the minimum standards listed in BLM Manual Section 9113 and shall be constructed under the direction of a qualified construction supervisor(s). The qualified construction supervisor shall be an engineer, company superintendent or other representative who is competent and knowledgeable in oilfield road and drillsite construction, and able to speak for the operator. The dirt contractor, or drilling/completion foremen whose primary expertise is not in construction, do not qualify as construction supervisors.
- I) The proposed access road connects to county maintained Gilsonite Ridge Road, aka FR 337. A County Approach Permit with Duchesne County is required with an associated fee of \$75.00. The application will be submitted to the Duchesne County Road and Bridge Department in Duchesne, Utah, along with a check for the permit fee. We anticipate the permit will be approved in approximately 30 days. The approach will be inspected and approved by the road supervisor before and after construction.

# 3) LOCATION OF EXISTING WELLS WITHIN A TWO MILE RADIUS

Proposed NONE

Drilling SEE WELLS WITHIN A TWO MILE RADIUS TABLE Abandoned SEE WELLS WITHIN A TWO MILE RADIUS TABLE

Disposal/Injection NONE

Shut-In SEE WELLS WITHIN A TWO MILE RADIUS TABLE

Producing SEE WELLS WITHIN A TWO MILE RADIUS TABLE

#### LOCATION OF EXISTING FACILITIES OPERATED BY VANTAGE

T6S R3W Sec 20 NW/4NW/4 Shut-In

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#### 4) NEW PRODUCTION FACILITIES PROPOSED

- A) USFS/BLM will be contacted prior to construction of production facilities. A Sundry Notice (SN) will be filed if requested by BLM.
- B) Dimension of Proposed Facility of the pad is  $\pm 325$ ' long and  $\pm 261$ ' wide, containing  $\pm 2.0$  acres, with a total well site disturbance of  $\pm 2.316$  acres. The well access road is  $\pm 0.20$  miles long with a 30' right-of-way, disturbing  $\pm 0.6$  acre. New surface disturbance associated with access road and the well pad is estimated to be  $\pm 2.9$  acres. No pipelines or surface facilities are proposed. See attached plats and Topo Map B.
- C) Traveled portion of production site will be gravel surfaced upon completion of production facility installation and prior to production. Site preparation for production will be done with standard excavation equipment using native materials. Additional surface material will be obtained from commercial sources or an approved borrow area. Construction and maintenance will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil will be deemed too wet.
- All above ground permanent structures will be painted to blend with the surrounding landscape. The color used will be as agreed upon with USFS/BLM. To reduce the view of production facilities from visibility corridors and private residences, facilities will not be placed in visually exposed locations (such as ridgelines and hilltops). The tallest structure will be no greater than 22' in height.
- E) Production facilities may vary according to actual reservoir discovered and will be engineered upon completion of well tests. Production facilities will be clustered and placed away from cut/fill slopes to allow the maximum recontouring of cut/fill slopes.
- F) If well is a producer, all production facilities will be authorized by a SN.
- G) No facilities will be constructed off location.
- H) Pursuant to Onshore Order No. 7 (OSO #7), this is a request for authorization for reserve pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by BLM and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method will be submitted along with any necessary water analyses, in compliance with OSO #7 as soon as possible, but no later than 45 days after the date of first production. Any method of disposal, which has not been approved prior to the end of the authorized 90-day period, will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by BLM.

## 5) LOCATION AND TYPE OF WATER SUPPLY

- A) Water supply will be from the Ouray Municipal Water Plant at Ouray, Utah, and/or Target Trucking Inc.'s water source in the SW/SW, Sec. 35 T9S R22E, Uintah County, than (State Water Right No. 49-1501). Water will be hauled by a licensed trucking company.
- B) If drilling the conductor or surface hole indicates the existence of water bearing zones, Operator will consider drilling a water well on the location to provide a more viable water source. Drilling a water well would reduce truck travel to the well site. No additional disturbance will result from drilling a water well. If a water well is drilled, it would be properly permitted with the Utah Division of Water Rights.

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# 6) SOURCE OF CONSTRUCTION MATERIALS

- A) All construction material for these location sites and access roads shall be of native borrow and soil material accumulated during the construction of the location sites and access road. Surface disturbance will be minimized to the extent feasible.
- B) All construction materials will come from federal land.
- C) No mineral materials will be required.

#### 7) WASTE DISPOSAL

- A) Drill cuttings will be buried in reserve pit when dry.
- B) Drilling fluid will be evaporated and then buried in the reserve pit when dry. A "Closed Mud System" may be used if technically feasible and available at the time of drilling operations. If so, water may be hauled to and used at another drillsite in the area.
- C) Completion fluids will be flowed to the reserve pit and allowed to evaporate.
- D) Reserve pit layout is illustrated on Figures 1 and 3
- E) Reserve pit will be lined with a synthetic liner 12 mil or thicker. The reserve pit liner shall be made of any manmade synthetic material of sufficient size and qualities to sustain a hydraulic conductivity no greater than  $1 \times 10^{-7}$  cm/sec after installation and which is sufficiently reinforced to withstand normal wear and tear associated with the installation and pit use thereof. The liner shall be chemically compatible with all substances that may be put into the pit.
- F) Reserve pit will be fenced on three sides during drilling operations, and on fourth side at time of rig release. Pit will remain fenced until backfilled.
- G) Flare pit for air drilling will (if used) be located minimum 100' from wellbore.
- H) Produced fluid will be contained in test tanks during completion and testing.
- I) Sewage disposal facilities will be in accordance with State and Local Regulations.
- J) Garbage and other waste solid waste will be contained in a portable trash cage which will be totally enclosed with small mesh wire. Cage and contents will be transported to and trash dumped at a UDEQ approved Sanitary Landfill upon completion of operations.
- K) Trash will be contained in trash cage at all times.
- L) Upon release of the drilling rig, rathole and mousehole will be filled. Debris and equipment not required for production will be removed.

# 8) <u>ANCILLARY FACILTIES</u>

No ancillary facilities are proposed.

# 9) <u>WELLSITE LAYOUT</u>

- A) See attached drillsite plat and cut/fill diagram.
- B) Roads and well production equipment, such as tanks, treaters, separators, vents, electrical boxes, and equipment associated with pipeline operation, will be placed on location so as to permit maximum interim reclamation of disturbed areas. If equipment is found to interfere with the proper interim reclamation of disturbed areas, the equipment may be moved so proper recontouring and revegetation can occur.
- C) 6" of topsoil will be removed prior to location construction from the reserve pit area and/or any other disturbed areas. Topsoil will be stockpiled adjacent to the wellsite within the maximum disturbed area shown on the wellsite plat.
- D) Topsoil and spoils pile will be clearly separated as shown on Figure 1.

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- E) Erosion control measures will be applied pursuant to Vantage's General Permit to Discharge Stormwater under the Utah Pollutant Discharge Elimination System and accompanying Stormwater Pollution Prevention Plan.
- F) A "Closed Mud System" may be used if technically feasible and available at the time of drilling operations. If so, the reserve pit will be reduced in size.

# 10) <u>PIPELINES AND FLOWLINES</u>

A separate Right-of-Way (ROW) application for the pipeline route will be submitted separately after consultation with the USFS.

#### 11) PLANS FOR RECLAMATION OF THE SURFACE:

- A) Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil will be deemed too wet.
- B) Earthwork for interim and final reclamation must be completed within six (6) months of well completion or plugging (weather permitting).
- C) In areas that will not be drill-seeded, the seed mix will be broadcast-seeded at twice the application rate shown and covered 0.25 to 0.5 inches deep with a harrow or drag bar or will be broadcast-seeded into imprints, such as fresh dozer cleat marks.
- D) No seeding will occur from May 15 to September 15. Fall seeding is preferred and will be conducted after September 15 and prior to ground freezing. Spring seeding will be conducted after the frost leaves the ground and no later than May 15.
- E) Annual or noxious weeds shall be controlled on all disturbed areas as directed by the Field Office Manager. An intensive weed monitoring and control program will be implemented beginning the first growing season after interim and final reclamation. Noxious weeds that have been identified during monitoring will be promptly treated and controlled. A Pesticide Use Proposal (PUP) will be submitted to the USFS/BLM for approval prior to the use of herbicides. All reclamation equipment will be cleaned prior to use to reduce the potential for introduction of noxious weeds or other undesirable nonnative species. The operator will coordinate all weed and insect control measures with state and/or local management agencies.
- F) Reclaimed areas will be monitored annually. Actions will be taken to ensure that reclamation standards are met as quickly as reasonably practical.
- Reclamation monitoring will be documented in a reclamation report and submitted to the AO. The report will document compliance with all aspects of the reclamation objectives and standards, identify whether the reclamation objectives and standards are likely to be achieved in the near future without additional actions, and identify actions that have been or will be taken to meet the objectives and standards. The report will also include acreage figures for: Initial Disturbed Acres; Successful Interim Reclaimed Acres; Successful Final Reclaimed Acres. Reports will not be submitted for sites approved by the AO in writing as having met interim or final reclamation standards. Any time 30% or more of a reclaimed area is redisturbed, monitoring will be reinitiated.
- H) The AO will be informed when reclamation has been completed, is successful, and the site is ready for final inspection.

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# **INTERIM RESTORATION (Production)**

- A) Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut/fill slopes. These areas will be re-seeded.
- B) Wellpad size will be reduced to minimum size necessary to conduct safe operations. Cut/fills will be reduced to 3:1 or shallower.
- C) Reserve pits will be closed and backfilled as soon as the pit contents are dry enough to do so, or no later than the end of the next full summer following rig release, whichever comes first, to allow sufficient time for the pit contents to dry. Reserve pits remaining open after this period will require written authorization of the AO. Immediately upon well completion, any hydrocarbons or trash in the reserve and flare pits will be removed. Pits will be allowed to dry, be pumped dry, or solidified in-situ prior to backfilling.
- D) Following completion activities, pit liners will be removed or removed to the solids level and disposed of at an approved landfill, or treated to prevent their reemergence to the surface and interference with long-term successful revegetation. If it was necessary to line the pit with a synthetic liner, the pit will not be trenched (cut) or filled (squeezed) while containing fluids. When dry, the pit will be backfilled with a minimum of five (5) feet of soil material. In relatively flat areas, the pit area will be slightly mounded to allow for settling and to promote surface drainage away from the backfilled pit.
- E) The portions of the cleared well site not needed for operational and safety purposes will be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Sufficient level area will remain for setup of a workover rig and to park equipment. In some cases, rig anchors may need to be pulled and reset after recontouring to allow for maximum interim reclamation.
- F) Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including road cut/fills and to within a few feet of the production facilities, unless an all-weather, surfaced, access route or small "teardrop" turnaround is needed on the well pad.
- G) Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by USFS/BLM (shown below) to meet reclamation standards will be used. The seed mix will be used on all disturbed surfaces including pipelines and road cut/fill slopes.
- H) To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, debris, and rock over recontoured cut/fill slopes.
- I) A proposed seed mixture for this location is:
  - 4.80#/acre PLS Sand bluestem (Elida, Garden)
  - 0.20#/acre PLS Sand lovegrass (Bend)
  - 1.35#/acre PLS Switchgrass (Granvillo or Blackwolf)
  - 1.30#/acre PLS Prairie sandreed (Goshen)
  - 1.60#/acre PLS Western Wheatgrass (Arriba or Barton)
  - 9.25#/acre PLS TOTAL

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- J) Reclamation will be considered successful if the following criteria are met:
  - · 70 percent of predisturbance cover
  - · 90 percent dominate species\*
  - · Erosion features equal to or less than surrounding area

The vegetation will consist of species included in the seed mix and/or occurring in the surrounding natural vegetation.

#### FINAL RESTORATION (P & A – Removal of equipment)

- A) Flowlines on location will be removed before site reclamation and all flowlines between the wellsite and production facilities will remain in place and will be filled with water.
- B) If necessary to ensure timely revegetation, the pad will be fenced to USFS standards to exclude livestock grazing for the first two growing seasons or until seeded species become firmly established, whichever comes later. Fencing will meet standards found on page 18 of the BLM Gold Book, 4<sup>th</sup> Edition, or will be fenced with operational electric fencing.
- C) Revegetation will be accomplished by planting mixed grasses as specified below. Revegetation is recommended for road area as well as around production site.
- D) A proposed seed mixture for this location is:
  - 4.80#/acre PLS Sand bluestem (Elida, Garden)
  - 0.20#/acre PLS Sand lovegrass (Bend)
  - 1.35#/acre PLS Switchgrass (Granvillo or Blackwolf)
  - 1.30#/acre PLS Prairie sandreed (Goshen)
  - 1.60#/acre PLS Western Wheatgrass (Arriba or Barton)
  - 9.25#/acre PLS TOTAL
- E) Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation. A certified weed-free seed mix designed by USFS (shown above) to meet reclamation standards will be used. The seed mix will be used on all disturbed surfaces including pipelines and road cut/fill slopes.
- F) Distribute topsoil, if any remains, evenly over the location, and seed according to the above seed mixture. If needed the access road and location shall be ripped or disked prior to seeding. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
- G) All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Resalvaged topsoil will be spread evenly over the entire disturbed site to ensure successful revegetation. To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, woody debris, and large rocks over recontoured cut/fill slopes.

# 12) General Information

- A) Project area is situated in the undulated uplands of the western part of the Uintah Basin.
- B) Topographic and geologic features moderate relief area, moderately drained, sand-clay deposition, surrounded by steep uplands with highly eroded drainages.
- C) Soil characteristics clay loam.

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- D) Flora consists of: Piñon pine, Juniper, Sagebrush, and short grasses. Please refer to archaeological report and botany report to be included in the NEPA document.
- E) Fauna none observed. Please refer to the wildlife report to be included in the NEPA document.
- F) Concurrent surface use grazing and hunting.
- G) Mineral Lessor:

Bureau of Land Management, Vernal Field Office 170 South 500 East, Vernal, UT 84078 Phone: 435-781-4400; Fax: 435-781-4410

H) Surface Management Agency:

U.S. Forest Service, Duchesne Ranger District 85 W. Main St., Duchesne, UT 84021 Phone: 435-738-2482; Fax: 435-781-5215

- I) Proximity of water, occupied dwellings or other features: un-named intermittent drainage ±272' to the southeast; flowing into Gilsonite Draw.
- J) Archaeological, cultural and historical information for the new construction on federal lands will be submitted separately by Montgomery Archaeological Consultants.
- K) If any fossils are discovered during construction, the operator shall cease construction immediately and notify the AO so as to determine the significance of the discovery.
- L) A Class III (100% pedestrian) cultural resource inventory shall be completed prior to disturbance by a qualified professional archaeologist in the following areas: Well location. A report of the inventory will be submitted and approved by the BLM with stipulations as appropriate in order to comply with EO 11593 and Section 106 of the National Historic Preservation Act of 1966. See Section "General Information K" above.

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- M) The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the AO. The AO will inform the operator as to the work needed to determine the following:
  - Whether the materials appear eligible for the National Register of Historic Places;
  - The mitigation measures the operator will likely have to undertake before the site can be used (assuming in site preservation is not necessary); and,
  - A timeframe for the AO to complete an expedited review to acquire the State Historic Preservation Officer's concurrence that the findings of the AO are correct and that mitigation is appropriate.
- N) Vantage maintains a file, per 29 CFR 1910.1200(g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous substances, EHS, and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

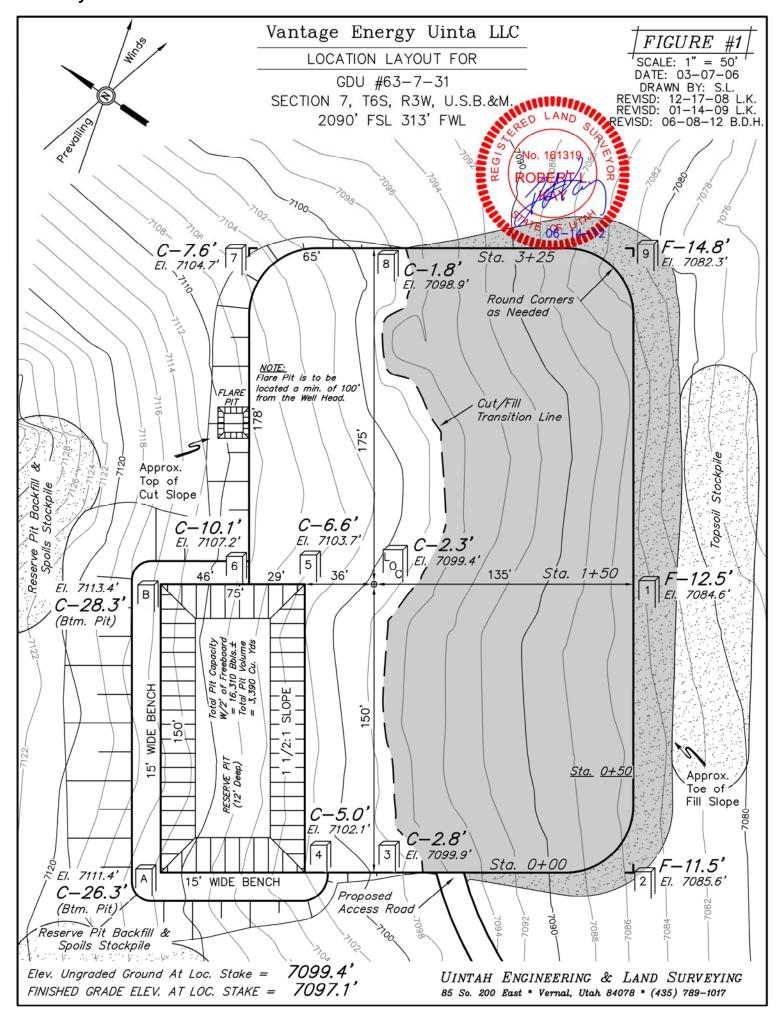
Sundry Number: 29068 API Well Number: 43013506600000 Vantage Energy Uinta LLC T6S, R3W, U.S.B.&M. Well location, GDU #63-7-31, located as shown in the NW 1/4 SW 1/4 of Section 7, T6S, R3W, U.S.B.&M., Duchesne County, Utah. N89°24'04"W - 2634.66' (Meas.) S89°56'E - 2641.32' (G.L.O.) BASIS OF ELEVATION Set Marked Set Marked BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE 2619.29' (Meas. QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6097 FEET. BASIS OF BEARINGS BASIS OF BEARINGS IS A G.P.S. OBSERVATION. M., £0, 80, 001 LINE TABLE (G.L.O. LINE DIRECTION LENGTH S72"15'10"E 364' 5280.00 Set Marked GDU #63-7-31 Elev. Ungraded Ground = 7099' S00°01'W 313' 660' Target Bottom Hole SCALE S00°04'53"W 2637.29' (Meas CERTIFICATE THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM 2090, FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME AND FORRECT TO BEST OF MY KNOWLEDGE AND BELIEF REGISTIZED LAND SURVEYOR REGISTRATION, NO. 161319 Set Marked Stone, REVISED: 06-08-12 B.D.H. REVISED: 12-17-08 L.K. Pile of Stones S89°49'48"E - 5265.48' (Meas.) UINTAH ENGINEERING & LAND SURVEYING Set Marked Stone. Pile of Stones 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017 LEGEND: SCALE DATE SURVEYED: DATE DRAWN: 1" = 1000'11-06-08 11-14-08 90° SYMBOL NAD 83 (SURFACE LOCATION) NAD 83 (TARGET BOTTOM HOLE) REFERENCES PARTY LATITUDE = 39'58'20.96" (39.972489) LATITUDE = 39'58'22.06" (39.972794) A.H. M.A. G.L.O. PLAT PROPOSED WELL HEAD. LONGITUDE = 110°16'21.60" (110.272667)  $LONGITUDE = 110^{\circ}16'26.05" (110.273903)$ NAD 27 (TARGET BOTTOM HOLE) NAD 27 (SURFACE LOCATION) WEATHER FILE = SECTION CORNERS LOCATED. LATITUDE = 39.58.21.09" (39.972525) LATITUDE =  $39^{\circ}58'22.19''$  (39.972831)

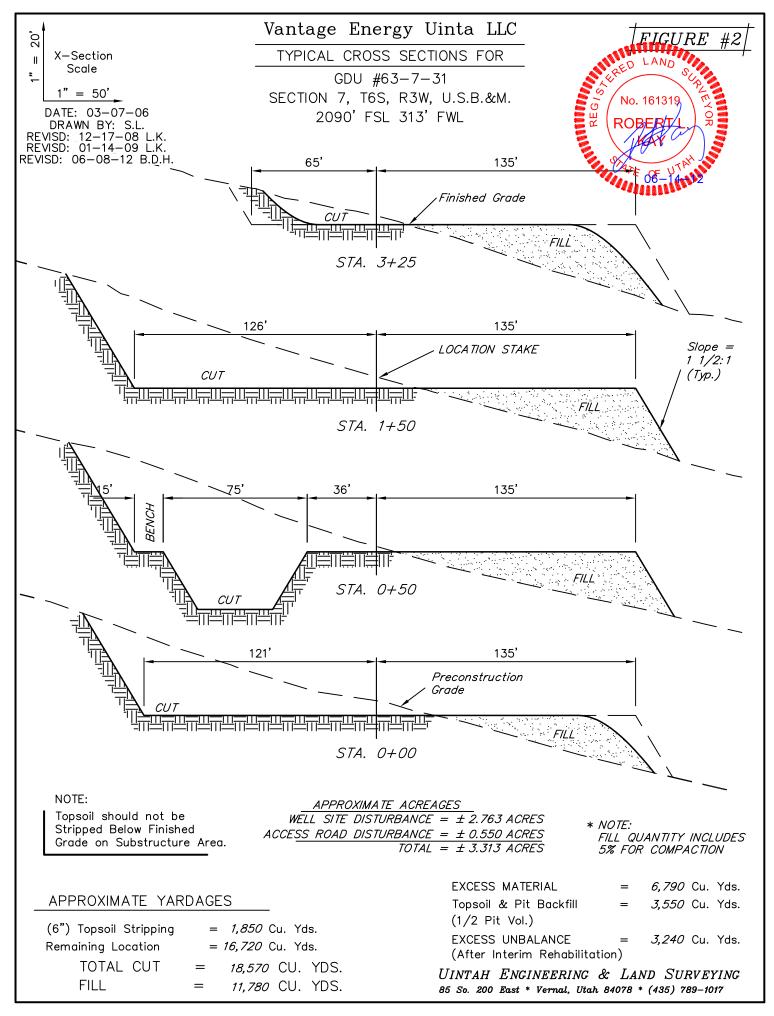
LONGITUDE = 110°16'23.50" (110.273194)

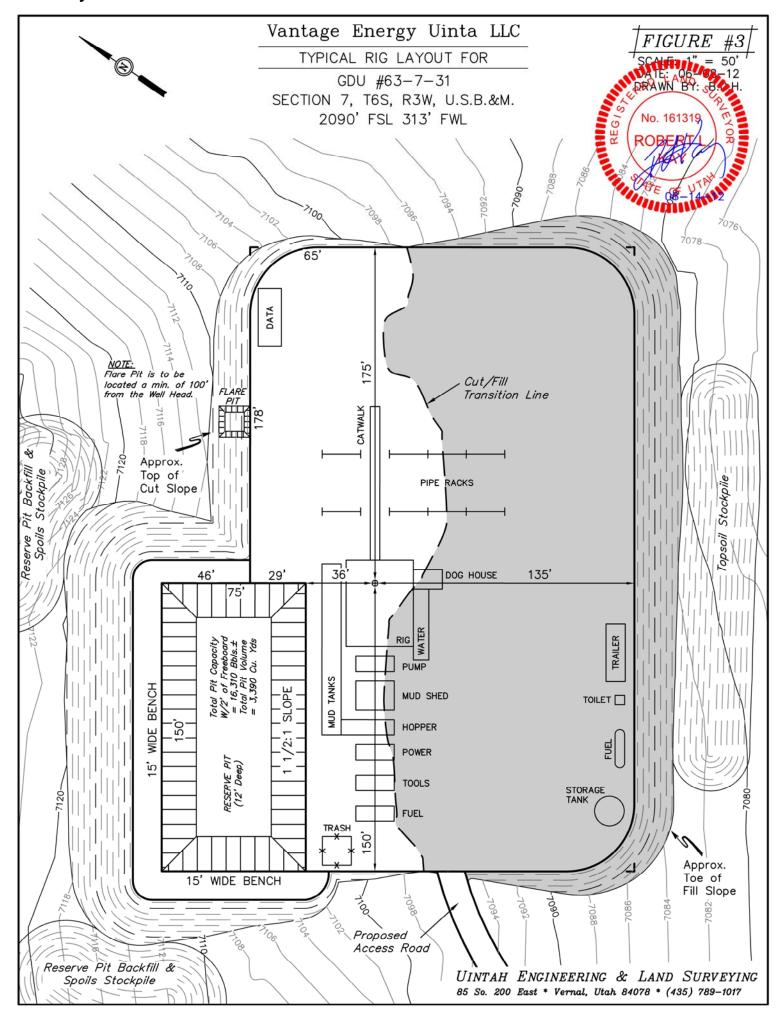
LONGITUDE =  $110^{\circ}16'19.05''$  (110.271958)

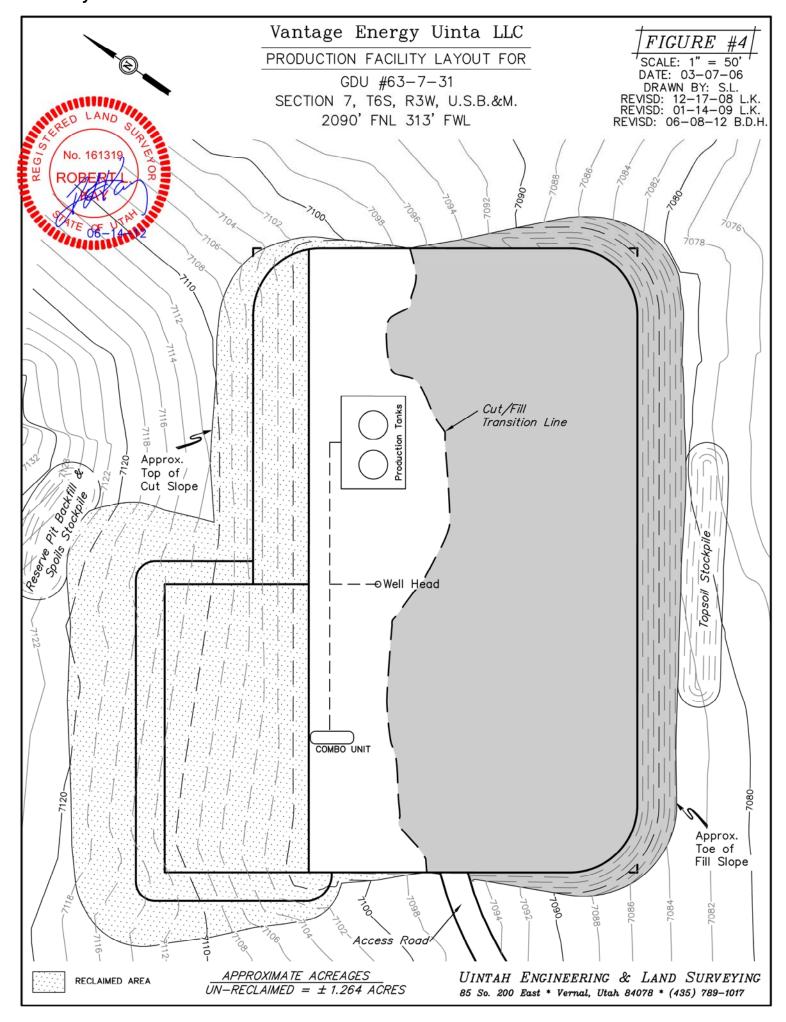
COMPANY NAME **RECEIVED:** Aug. 17, 2012

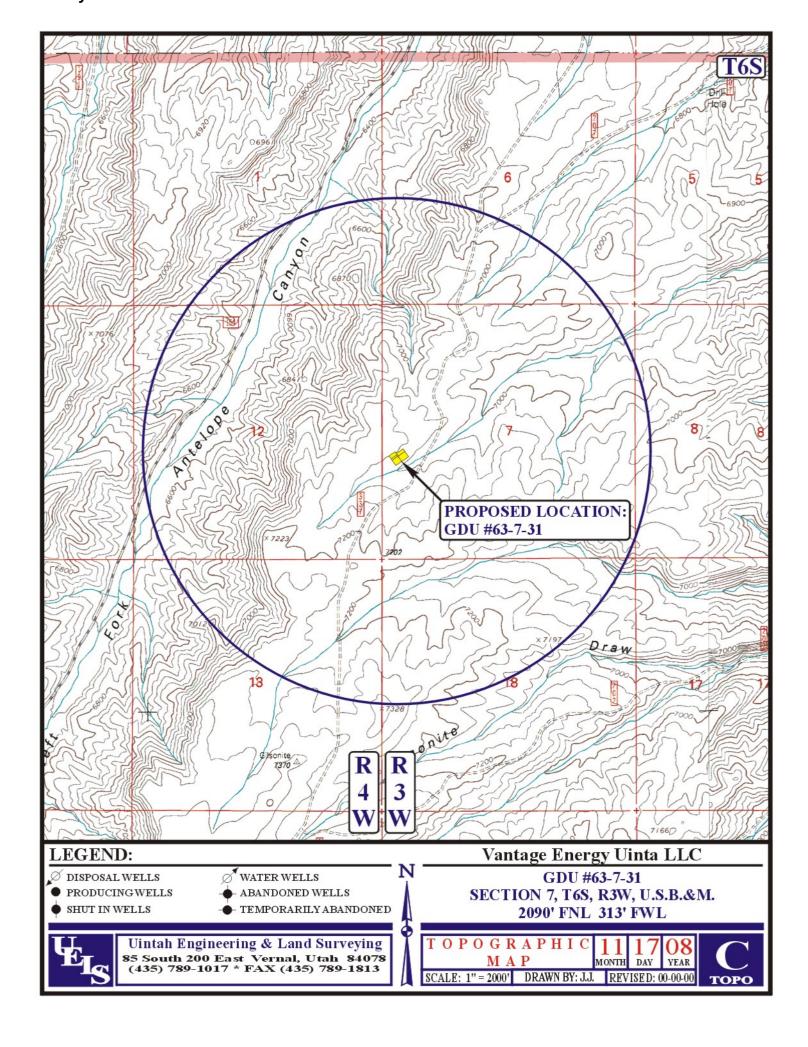
WARM











Sundry Number: 29068 API Well Number: 43013506600000

# Vantage Energy Uinta LLC GDU #63-7-31

LOCATED IN DUCHESNE COUNTY, UTAH SECTION 7, T6S, R3W, U.S.B.&M.

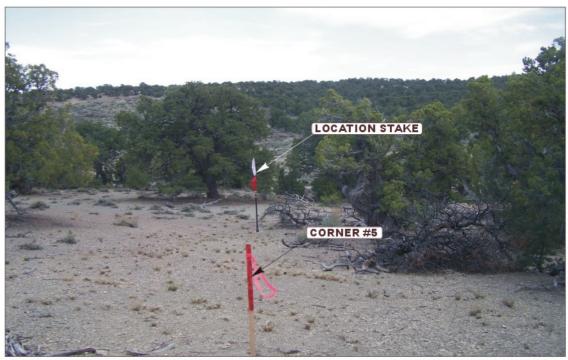


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



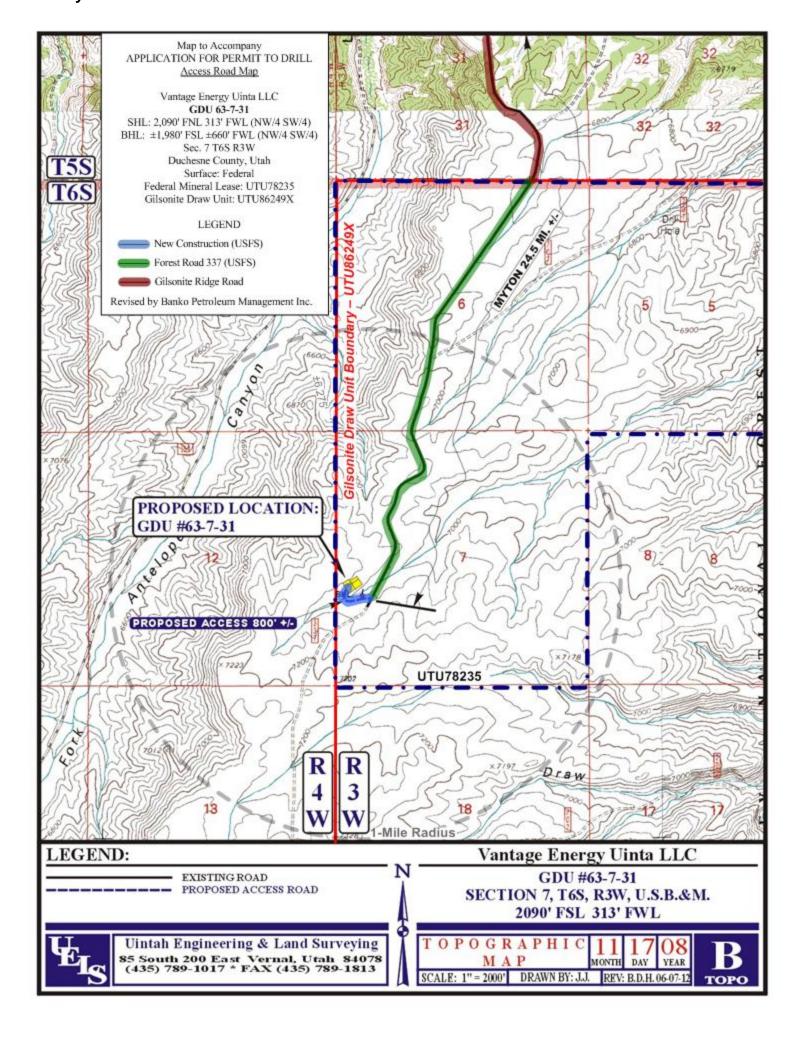
PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORHTWESTERLY

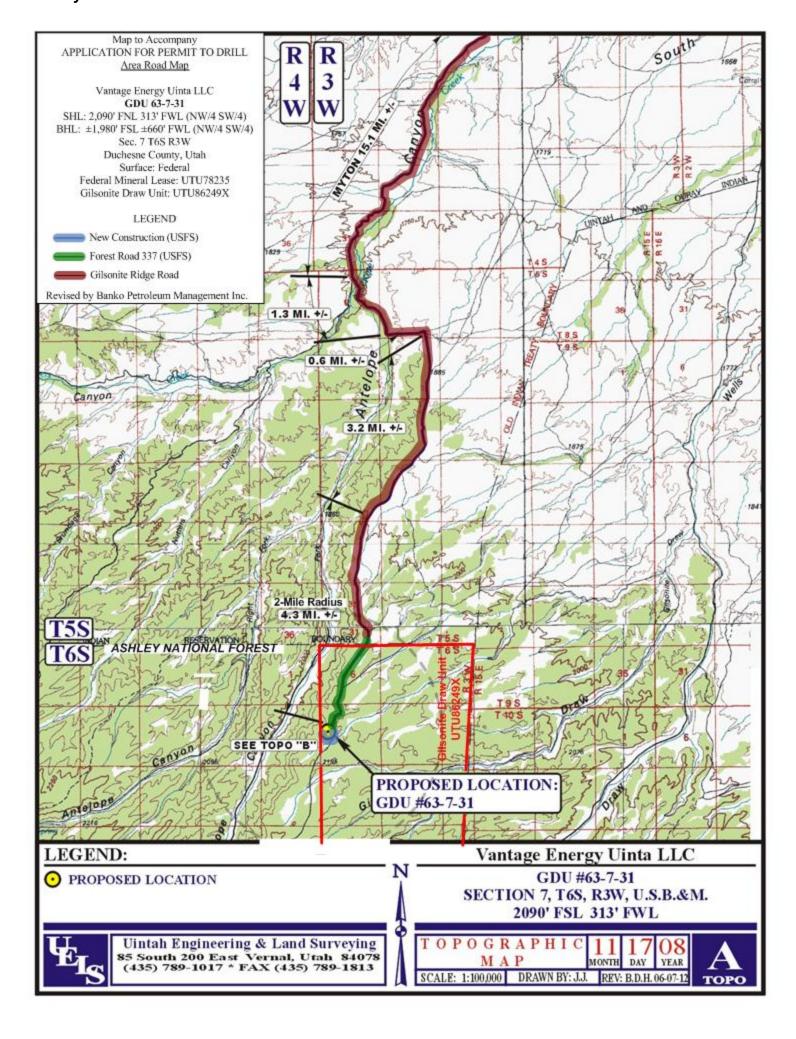


LOCATION	11 MONTH	16 DAY	08 YEAR	рното	
TAKEN BY: GO. DRAWN BY: J.J.		REV:	B.D.H.	06-07-12	

Sundry Number: 29068 API Well Number: 43013506600000



Sundry Number: 29068 API Well Number: 43013506600000



	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU78235
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.		7.UNIT or CA AGREEMENT NAME: GILSONITE DRAW
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: GDU 63-7-31
2. NAME OF OPERATOR: VANTAGE ENERGY UINTA L	LC		9. API NUMBER: 43013506600000
3. ADDRESS OF OPERATOR: 116 Inverness Drive East, S	Ste 107 , Englewood , CO, 80112	PHONE NUMBER: 303 386-8600 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2090 FSL 0313 FWL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 07 Township: 06.0S Range: 03.0W Me	ridian: U	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
7	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
5/16/2013	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all pertinent details including dates.	depths, volumes, etc.
	nta LLC is requesting an exte		Approved by the
	II for the above referenced v		Utah Division of
ar	mount of time possible. Tha	nk you.	Oil, Gas and Mining
			Date: April 17, 2013
			By: bally
NAME (PLEASE PRINT)	PHONE NUMB		
Andrea Gross	303 941-0506	Project Coordinator	
SIGNATURE N/A		<b>DATE</b> 4/16/2013	



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013506600000

API: 43013506600000 Well Name: GDU 63-7-31

Location: 2090 FSL 0313 FWL QTR NWSW SEC 07 TWNP 060S RNG 030W MER U

Company Permit Issued to: VANTAGE ENERGY UINTA LLC

Date Original Permit Issued: 4/21/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

···
• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?</li> <li>Yes</li> <li>No</li> </ul>
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
nature: Andrea Gross Date: 4/16/2013

Title: Project Coordinator Representing: VANTAGE ENERGY UINTA LLC

# Vantage Energy Uinta LLC GDU 63-7-31 API No. 43-013-50660

SHL: 2,090' FSL 313' FWL (NW/4 SW/4)

BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4) within a 60' radius

Sec. 7 T6S R3W Duchesne County, Utah Federal Lease: UTU78235

Gilsonite Draw Federal Unit: UTU86249X

### NINE POINT DRILLING PROGRAM Revised August 17, 2012

(All drilling procedures will comply with BLM *Onshore Oil and Gas Orders 1 and 2*)

Vantage Energy Uinta LLC respectfully requests that all information regarding this well be kept CONFIDENTIAL.

#### 1) GEOLOGIC MARKERS

Anticipated tops of geologic markers are indicated in Table 1

**Table 1 Estimated Tops of Geologic Markers** 

Formation	Vertical Depth	Measured Depth	Description
Green River	Surface	Surface	Sandstone/siltstone/shale
Garden Gulch	3,384'	3,400'	Sand and Siltstone
Douglas Creek	4,279'	4,300'	Sandstone/siltstone/shale
Castle Peak	5,279'	5,300'	Sandstone/siltstone/shale
Uteland Butte	5,679'	5,700'	Carbonate/shale/sandstone
Wasatch	5,879'	5,900'	Shale/Sandstone
Total Depth	5,980'	6,001'	TD +/ 150' into Wasatch

Surface Elevation: 7,099' (Ungraded Ground); 7,097' (Est. KB).

Proposed Total Vertical Depth: 5,980' Proposed Total Measured Depth: 6,001'

#### 2) DEPTHS OF WATER AND MINERAL-BEARING ZONES

Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicated no permitted water wells within three miles of the proposed location. Utah Division of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

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GDU 63-7-31

**Table 2: Principal Anticipated Water and Mineral-bearing Zones** 

Formation	Vertical Depth	Measured Depth	Potential Contents
Green River	Surface	Surface	Water
Garden Gulch	3,384'	3,400'	Oil/Gas
Douglas Creek	4,279'	4,300'	Oil/Gas
Castle Peak	5,279'	5,300'	Oil/Gas
Uteland Butte	5,679'	5,700'	Oil/Gas
Wasatch	5,879'	5,900'	Oil/Gas

#### 3) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

The maximum anticipated surface pressure for this well is calculated to be **1,364 psi**. Therefore, rules for a 2,000 psi rated BOP and choke manifold system are applicable. However, the typical rig inventory will consist of a 3,000 psi rated BOP and choke manifold. As such, the rig's BOP and choke manifold equipment will be tested to the standards for a 2,000 psi BOP system. A diagram of the proposed 2,000 psi rated BOP stack configuration is shown in **Fig. 1**.

BOPs and choke manifold will be installed and pressure tested before drilling out from under surface casing (subsequent pressure tests will be performed whenever pressure seals are broken) and then will be checked daily as to mechanical operating condition. BOPs will be pressure tested at least once every 30 days. The annular preventer, pipe rams, and blind rams will be activated on each trip and Operator will conduct weekly BOP drills with the rig crew. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

Ram type preventers and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. **Please see variance request at end of program for this section.** 

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22psi/ft or 1,500psi, whichever is greater, not to exceed 70% of internal yield. **Please see variance request at end of program for this section.** 

#### Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2* for 2,000 psi systems. Irregardless of the rig selected, the rig's accumulator system shall have sufficient capacity to close all BOP equipment and retain 200 psi above precharge pressure. The proposed pressure control equipment will meet or exceed standards specified in the Order.

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#### 4) CASING PROGRAM

Casing of quality equal to or better than that indicated in **Tables 3** and **4** will be used for this well. Actual casing used will be dependent on availability.

**Table 3 Proposed Casing Program** 

Depth (MD)	<b>Hole Diameter</b>	<b>Casing Diameter</b>	Casing Weight and Grade
$0 - \pm 40'$	20"	14"	Optional Conductor – Only if Required
0 – 500'	12 1/4"	8 5/8"	24# J55 ST&C, API New Pipe
0 – 6,001'	7 7/8"	5 1/2"	15.5# K55 LT&C, API New Pipe

**Table 4: Proposed Casing Specifications and Design Safety Factors** 

Size	Collapse (psi)	Burst (psi)	Body Strength (1,000 lbs.)	Joint Strength (1,000 lbs.)	Thread	*Safety Factors		ors
						Burst	Collapse	Tension
						Design	Design	Design
						(1.2)	(1.0)	(1.4)
14"	NA – 0.219" wall structural and to seal shallow gravels to allow air drilling surface hole			Weld	NA	NA	NA	
8 5/8"	1,370	2,950	381	244	ST&C	1.96	5.55	4.26
24# J55	1,370	2,730	301	244	Siac	1.90	5.55	7.20
5 1/2" 15.5# J55	4,040	4,810	248	217	LT&C	1.25	1.48	1.62

<sup>\*</sup>Safety Factor Calculation Assumptions:

#### **Surface Casing:**

Burst Load: Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required casing test pressure.

#### **MASP**

```
Load = (Formation Gradient – 0.22 psi/ft) * Total Depth, TVD
          = (0.44 \text{ psi/ft} - 0.22 \text{ psi/ft}) * 5,980 \text{ ft.}
          = 1,316 \text{ psi}
```

#### TEST PRESSURE

```
= Greater of 1,500 psig or 0.22 \text{ psi/ft} * 500 \text{ ft} = 110 \text{ psig}
Load = Greatter of 1,500 psig or 1,364 psig or 110 psig
```

SF Burst = 2,950 psi / 1,500 psi = 1.96

**Collapse Load:** Assumes worse case loading of evacuated casing during cementing process.

Cement density = 15.8 ppgLoad = 15.8 ppg \* 0.052 \* 500 ft= 410.8 psi

SF Collapse = 1370 psi / 410 psi = 3.33

**Tension Load:** Assumes air weight at total depth + 50,000 lbs overpull design factor.

```
= (24 \text{ lbs/ft} * 500 \text{ ft}) + 50,000 \text{ lbs overpull}
= 62,000  lbs
```

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GDU 63-7-31

SF Tension = 244,000 lbs / 62,000 lbs = 43.94

**Test Pressure =** 

#### **Production Casing**

**Burst Load:** Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

```
Load = 4810 psi * 0.80
= 3848 psi
SF Burst = 4810 psi / 3848 psi = 1.25
```

**Collapse Load:** Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

```
Load = 0.44 psi/ft * 5,980 ft
= 2631 psi
SF Collapse = 4040 psi / 2631 psi = 1.53
```

**Tension Load:** Assumes buoyed weight of casing at total depth + 50,000 lbs overpull design factor.

```
Load = [15.5 \text{ lbs/ft} * 6,001 \text{ ft*} ((65.5 - 9.0) / 65.5)] + 50,000 \text{ lbs}
= 129,994 \text{ lbs} + 50,000 \text{ lbs}
= 179,994 \text{ lbs}
SF Tension = 217,000 \text{ lbs} / 179,994 \text{ lbs} = 1.62
```

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#### 5) **CEMENT PROGRAM**

**Table 5: Proposed Cement Program** 

Measured	Hole	Casing	Cement
Depth	Diameter	Diameter	
0' - ± 40'	20"	14"	Optional structural conductor if required: Grout with approximately 3.5 cubic yards of redi-mix back to surface (includes 100% excess)  TOC: Surface (Top-off per visual observation)
			Single Slurry System (300' – Surface) + 40' Shoe
			<u>Joint</u>
			225 sks Class G + 2% CaCl <sub>2</sub> + ½ lb/sk celloflake.
0' – 500'	12 1/4"	8 5/8"	Density: 15.8 ppg Yield: 1.17 cuft/sk Water: 5.0 gal/sk Excess = 100% in open hole
			TOC: Surface (Top-off per visual observation)
0' - 6,001'	7 7/8"	5 1/2"	Lead System (4,000' - 2,000')  129 sks Premium Lite II + 10% Gel + 10 lbs/sk gilsonite + 3% KCL +0.5% Sodium Metasillicate + 5 lbs/sk CSE-2 + ½ lb/sk celloflake + 3 lbs/sk Kol Seal + 0.5 lbs/sk Static Free + 0.002 gps FP-6L  Density: 11.0 ppg Yield: 3.50 cuft/sk Water: 21.4 gal/sk *Excess: 30%  Tail System (6,001' - 4,000') + 40' Shoe Joint 413 sks 50:50 (Class G:Poz) + 2% gel + 3% KCL + 0.5% EC-1 + 0.15% R-3 + 0.3% Sodium Metasillicate + ½ lb/sk celloflake + 0.05 lbs/sk Static Free + 0.002 gps FP-6L  Density: 14.4 ppg Yield: 1.25 cuft/sk Water: 5.48 gal/sk *Excess: 30%

<sup>\*</sup>Note: The production hole cement volume excess factor will be adjusted on location by the caliper  $\log$ , and will be re-calculated using caliper volume + 10% excess factor.

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GDU 63-7-31

#### 6) MUD PROGRAM

The mud program for the proposed well is indicated in **Table 6.** 

**Table 6 Proposed Mud Program** 

Interval (feet)	Mud Weight (lbs/gallon)	Viscosity (secs/qt)	Fluid Loss (ccs/30 min)	Mud Type		
$0 - \pm 40$	NA	NA	NA	NA		
	Set optional 14" conductor with bucket rig					
40' - 500'±	NA	NA	N/C	Air/Mist		
	Run/	cement 8 5/8" surface c	easing			
500'± - 3,500'	8.3 - 8.9	28 - 48	10 - 18	FW / PHPA		
3,500' - TD	8.4 - 8.9	34 - 58	8 - 10	3% KCL / PHPA		
	Run Logs –	Run/cement 5 1/2" prod	luction casing	_		

Surface Hole Comments: Spud with "spudder rig" and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. <u>Please see</u> variance requests for this section.

Production Hole Comments: Drill out surface casing with fresh water using pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,500' "mud up" and "close in" the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and control lost circulation zones that may be encountered. Monitoring equipment will be installed on site to detect changes in mud volume.

#### 7) LOGGING, CORING, AND TESTING PROGRAM

The proposed logging program is indicated in **Table 7**.

**Table 7 Proposed Logging Program** 

Log Suites	Depth Range	Remarks
DIL-SP-LD-CN	Surface Casing to TD	Standard "triple combo" equivalent with resistivity-spontaneous potential, litho-density, compensated neutron, gamma ray, and caliper Will pull GR to surface
Dipole Sonic	$\pm$ 4,000' to TD	Optional – Operator's discretion Rock property data
Rotary Sidewall Cores ± 4,000' to TD		Optional – Operator's discretion PP/Lithology data (perm-porosity)

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the Douglas Creek through total depth. Cuttings will be sampled every 20-30 feet.

Prospective zones from the Douglas Creek formation through total depth will be perforated, tested, and potentially acid-washed. It is anticipated that multi-stage hydraulic fracture stimulations of the reservoir will be required.

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GDU 63-7-31

#### 8) ANTICIPATED PRESSURES AND HAZARDS

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.44 psi/ft, and then transition to slightly over pressure in the Price River sequence.

Estimated BHP Douglas Creek (4,260')

Estimated BHP Wasatch (5,830')

Estimated BHP Total Depth (5,980')

Hydrostatic head of gas/mud column

1,874 psi

2,565 psi

2,631 psi

0.22 psi/ft.

**Maximum design surface pressure** 0.44 - 0.22 psi/ft x 5,980 ft = 1,316 psi

No H2S zones are anticipated. Lost circulation can be encountered. A variety of sized lost circulation materials will be maintained on location in the event lost circulation is experienced. No abnormal lost circulation zones are anticipated. The proposed well is a southern extension test of producing wells in T5S-R3W. Abnormal pressures will not be experienced to the proposed depth in this area.

#### 9) DIRECTIONAL PROGRAM

This is a directional well. Please see the attached directional profile prepared by Multi-Shot LLC.

#### 10) OTHER INFORMATION

#### Contact Information and Personnel

Mailing Address
Vantage Energy Uinta LLC
116 Inverness Drive, Suite 107
Englewood, CO 80112

Main Number: 303-386-8600 Fax Number: 303-386-8700

Drilling Operations: John Moran Office Direct: 303-386-8610 Fax Direct: 303-386-8710 Mobile: 303-249-2234

E-Mail: John.Moran@VantageEnergy.com

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GDU 63-7-31

Completion/Production Operations: Ed Long

Office Direct: 303-386-8639 Fax Direct: 303-386-8739 Mobile: 720-635-2125

E-Mail: Ed.Long@VantageEnergy.com

Geologist: Andrea Steinle Office Direct: 303-386-8632 Fax Direct: 303-386-8732 Mobile: 303-408-0994

E-Mail: Andrea.Steinle@VantageEnergy.com

Landman: Michael Holland Office Direct: 303-386-8638 Fax Direct: 303-386-8738 Mobile: 303-396-3443

E-Mail: Michael.Holland@VantageEnergy.com

#### START DATE AND DURATION OF ACTIVITIES

#### Anticipated start date

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about May 15, 2013, with a target spud date of May 31, 2013. It is anticipated the drilling phase will require 25 days.

#### Completion

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 - 60 days.

The total project duration is therefore estimated to be <u>70 - 85 days</u>, and therefore anticipated to be concluded on or about August 8, 2013.

A string of 2 7/8 inch 6.5 lb/ft. J-55 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

Page 9 DRILLING PROGRAM
GDU 63-7-31

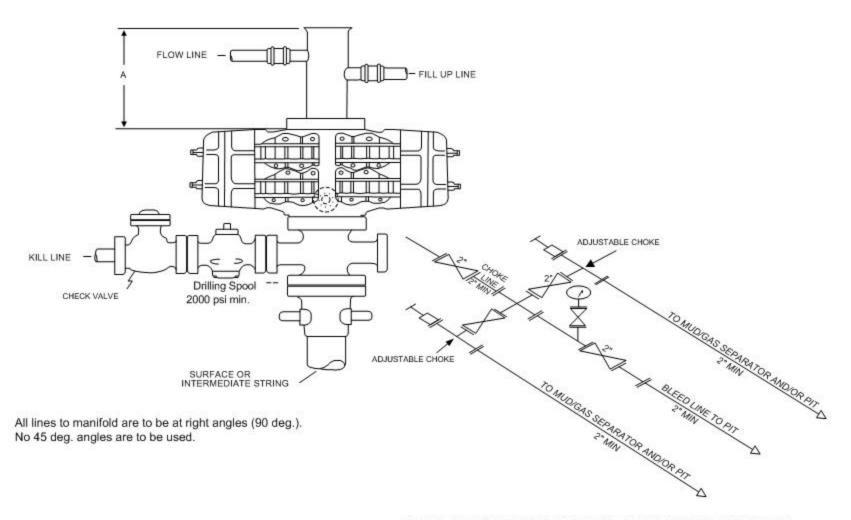
#### **VARIANCE REQUESTS**

1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item B, No. 1h*, regulations requiring the surface casing be tested to the greater of 1500 psig, or 70% of the minimum internal vield.

- a. The MASP for this well is calculated to be 1,364 psig, while the 70% yield rating is 2,065 psig.
- b. Operator therefore requests approval to test the surface casing to the lesser value of 1,500 psig which is greater than the MASP value.
- 2. Operator requests a variance to *Onshore Oil and Gas Order 2, Item A*, regulations which outline test pressures for 3M pressure control systems.
  - a. The drilling contractor's standard inventory will consist of 3M pressure control systems; however, as cited above, the MASP for this well is calculated to be 1,364 psig. As such, 2M pressure control equipment is sufficient for the drilling of this well.
  - b. Operator therefore requests approval to test contractor's 3M BOPE to 2M pressure system standards. The double ram preventer will be tested to 2,000 psig, and the annular preventer will be tested to 1,500 psig. Safety valves and choke/kill valves and lines will all be tested to 2,000 psig.
- 3. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E,* regulations for air/gas drilling operations. Operator plans to drill only the surface hole to a depth of 350', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the following equipment shall be in place and operational during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located...a minimum of 100 feet (100') from the wellbore".
  - a. Operator requests approval to use a diverter bowl rather than a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 300'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
  - b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
  - c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.

Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

#### ANNULAR PREVENTER MAY BE SUBSTITUTED FOR DOUBLE GATE PREVENTERS



2M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION MAY VARY

### **BLOWOUT PREVENTER**

2,000 psi minimum



# **Vantage Energy**

Duchesne County, UT SECTION 7 T6S, R3W GDU 63-7-31

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

09 July, 2012





### **Payzone Directional**





Database: EDM 2003.21 Single User Db

Company: Vantage Energy
Project: Duchesne County, UT
Site: SECTION 7 T6S, R3W

Well: GDU 63-7-31
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well GDU 63-7-31

GDU 63-7-31 @ 7113.50ft (AZTEC 673) GDU 63-7-31 @ 7113.50ft (AZTEC 673)

True

Minimum Curvature

Project Duchesne County, UT, Duchesne County, UT

Map System: US State Plane 1983

Geo Datum: North American Datum 1983

Map Zone: Utah Northern Zone

System Datum: Mean S

Mean Sea Level

Site SECTION 7 T6S, R3W

3,152,390.51 ft Northing: 39° 58' 26.61 N Latitude: Site Position: Easting: 1,986,466.48 ft 110° 15' 55.81 W Мар From: Longitude: **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 0.81

Well GDU 63-7-31, SHL LAT: 39 58 22.06 LONG:-110 16 26.05

 Well Position
 +N/-S
 -460.40 ft
 Northing:
 3,151,896.93 ft
 Latitude:
 39° 58′ 22.06 N

 +E/-W
 -2,354.80 ft
 Easting:
 1,984,118.42 ft
 Longitude:
 110° 16′ 26.05 W

Position Uncertainty 0.00 ft Wellhead Elevation: 7,113.50 ft Ground Level: 7,099.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/6/2012	11.25	65.67	52,084

Design	Design #1					
Audit Notes:						
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:		Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
		0.00	0.00	0.00	107.75	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,228.23	6.85	107.75	1,227.69	-4.15	12.97	3.00	3.00	0.00	107.75	
4,053.00	6.85	107.75	4,032.31	-106.82	333.70	0.00	0.00	0.00	0.00	
4,281.23	0.00	0.00	4,260.00	-110.97	346.67	3.00	-3.00	0.00	180.00	63-7-31 TGT
6,001.23	0.00	0.00	5,980.00	-110.97	346.67	0.00	0.00	0.00	0.00	

7/9/2012 1:42:45PM Page 2 COMPASS 2003.21 Build 40



### **Payzone Directional**

Planning Report



Database: EDM 2003.21 Single User Db

Company:
Project:
Site:

Vantage Energy
Duchesne County, UT
SECTION 7 T6S, R3W

Well: GDU 63-7-31
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well GDU 63-7-31

GDU 63-7-31 @ 7113.50ft (AZTEC 673) GDU 63-7-31 @ 7113.50ft (AZTEC 673)

True

Minimum Curvature

ed Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
8-5/8" Casi									
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build	3.00								
1,100.00	3.00	107.75	1,099.95	-0.80	2.49	2.62	3.00	3.00	0.00
1,200.00	6.00	107.75	1,199.63	-3.19	9.96	10.46	3.00	3.00	0.00
1,228.23	6.85	107.75	1,227.69	-4.15	12.97	13.62	3.00	3.00	0.00
Start 2824.	77 hold at 1228.2	3 MD							
1,300.00	6.85	107.75	1,298.95	-6.76	21.12	22.18	0.00	0.00	0.00
1,400.00	6.85	107.75	1,398.23	-10.40	32.48	34.10	0.00	0.00	0.00
1,500.00	6.85	107.75	1,497.52	-14.03	43.83	46.02	0.00	0.00	0.00
1,600.00	6.85	107.75	1,596.81	-17.66	55.18	57.94	0.00	0.00	0.00
1,700.00	6.85	107.75	1,696.09	-21.30	66.54	69.86	0.00	0.00	0.00
1,800.00	6.85	107.75	1,795.38	-24.93	77.89	81.78	0.00	0.00	0.00
1,900.00 2,000.00	6.85 6.85	107.75 107.75	1,894.67 1,993.95	-28.57 -32.20	89.25 100.60	93.71 105.63	0.00 0.00	0.00 0.00	0.00 0.00
2,100.00	6.85	107.75	2,093.24	-35.84	111.95	117.55	0.00	0.00	0.00
2,200.00	6.85	107.75	2,192.53	-39.47	123.31	129.47	0.00	0.00	0.00
2,300.00	6.85	107.75	2,291.81	-43.11	134.66	141.39	0.00	0.00	0.00
2,400.00	6.85	107.75	2,391.10	-46.74	146.02	153.31	0.00	0.00	0.00
2,500.00	6.85	107.75	2,490.39	-50.37	157.37	165.24	0.00	0.00	0.00
2,600.00	6.85	107.75	2,589.67	-54.01	168.72	177.16	0.00	0.00	0.00
2,700.00	6.85	107.75	2,688.96	-57.64	180.08	189.08	0.00	0.00	0.00
2,800.00	6.85	107.75	2,788.25	-61.28	191.43	201.00	0.00	0.00	0.00
2,900.00	6.85	107.75	2,887.53	-64.91	202.79	212.92	0.00	0.00	0.00
3,000.00	6.85	107.75	2,986.82	-68.55	214.14	224.84	0.00	0.00	0.00
3,100.00	6.85	107.75	3,086.11	-72.18	225.50	236.77	0.00	0.00	0.00
3,200.00	6.85	107.75	3,185.40	-75.82	236.85	248.69	0.00	0.00	0.00
3,300.00	6.85	107.75	3,284.68	-79.45	248.20	260.61	0.00	0.00	0.00
3,396.00	6.85	107.75	3,380.00	-82.94	259.10	272.05	0.00	0.00	0.00
Garden Gu									
3,400.00	6.85	107.75	3,383.97	-83.08	259.56	272.53	0.00	0.00	0.00
3,500.00	6.85	107.75	3,483.26	-86.72	270.91	284.45	0.00	0.00	0.00
3,600.00	6.85	107.75	3,582.54	-90.35	282.27	296.37	0.00	0.00	0.00
3,700.00	6.85	107.75	3,681.83	-93.99	293.62	308.30	0.00	0.00	0.00
3,800.00	6.85	107.75	3,781.12	-97.62	304.97	320.22	0.00	0.00	0.00
3,900.00	6.85	107.75	3,880.40	-101.26	316.33	332.14	0.00	0.00	0.00
4,000.00	6.85	107.75	3,979.69	-104.89	327.68	344.06	0.00	0.00	0.00
4,053.00	6.85	107.75	4,032.31	-106.82	333.70	350.38	0.00	0.00	0.00
Start Drop	-3.00								
4,100.00	5.44	107.75	4,079.04	-108.35	338.49	355.41	3.00	-3.00	0.00
4,200.00	2.44	107.75	4,178.79	-110.44	345.03	362.27	3.00	-3.00	0.00
4,281.23	0.00	0.00	4,260.00	-110.97	346.67	364.00	3.00	-3.00	0.00
		0.00	.,		0.0.07	001.00	0.00	5.00	0.00



### **Payzone Directional**

Planning Report



Database: EDM 2003.21 Single User Db

Company: Vanta
Project: Duch
Site: SEC

Vantage Energy Duchesne County, UT SECTION 7 T6S, R3W

Well: GDU 63-7-31
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well GDU 63-7-31

GDU 63-7-31 @ 7113.50ft (AZTEC 673) GDU 63-7-31 @ 7113.50ft (AZTEC 673)

True

Minimum Curvature

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,300.00 4,400.00 4,500.00	0.00 0.00 0.00	0.00 0.00 0.00	4,278.77 4,378.77 4,478.77	-110.97 -110.97 -110.97	346.67 346.67 346.67	364.00 364.00 364.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
4,600.00 4,700.00 4,800.00 4,900.00 5,000.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	4,578.77 4,678.77 4,778.77 4,878.77 4,978.77	-110.97 -110.97 -110.97 -110.97 -110.97	346.67 346.67 346.67 346.67	364.00 364.00 364.00 364.00 364.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
5,100.00 5,200.00 5,216.23	0.00 0.00 0.00	0.00 0.00 0.00	5,078.77 5,178.77 5,195.00	-110.97 -110.97 -110.97	346.67 346.67 346.67	364.00 364.00 364.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
<b>Castle Peak</b> 5,300.00 5,400.00	0.00 0.00	0.00 0.00	5,278.77 5,378.77	-110.97 -110.97	346.67 346.67	364.00 364.00	0.00 0.00	0.00 0.00	0.00 0.00
5,500.00 5,600.00 5,681.23	0.00 0.00 0.00	0.00 0.00 0.00	5,478.77 5,578.77 5,660.00	-110.97 -110.97 -110.97	346.67 346.67 346.67	364.00 364.00 364.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
Uteland Butte	е								
5,700.00 5,800.00	0.00 0.00	0.00 0.00	5,678.77 5,778.77	-110.97 -110.97	346.67 346.67	364.00 364.00	0.00 0.00	0.00 0.00	0.00 0.00
5,851.23	0.00	0.00	5,830.00	-110.97	346.67	364.00	0.00	0.00	0.00
Wasatch									
5,900.00 6,001.23	0.00 0.00	0.00 0.00	5,878.77 5,980.00	-110.97 -110.97	346.67 346.67	364.00 364.00	0.00 0.00	0.00 0.00	0.00 0.00
Total Depth									

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coord +N/-S (ft)	dinates +E/-W (ft)	Comment
500.00	500.00	0.00	0.00	8-5/8" Casing
1,000.00	1,000.00	0.00	0.00	Start Build 3.00
1,228.23	1,227.69	-4.15	12.97	Start 2824.77 hold at 1228.23 MD
3,396.00	3,380.00	-82.94	259.10	Garden Gulch
4,053.00	4,032.31	-106.82	333.70	Start Drop -3.00
4,281.23	4,260.00	-110.97	346.67	Douglas Creek
4,281.23	4,260.00	-110.97	346.67	Start 1720.00 hold at 4281.23 MD
5,216.23	5,195.00	-110.97	346.67	Castle Peak
5,681.23	5,660.00	-110.97	346.67	Uteland Butte
5,851.23	5,830.00	-110.97	346.67	Wasatch
6,001.23	5,980.00	-110.97	346.67	Total Depth

Sundry Number: 36742 API Well Number: 43013506600000 Project: Duchesne County, UT

VANTAGE ENERGY

Site: SECTION 7 T6S, R3W Well: GDU 63-7-31

Wellbore: Wellbore #1 Design: Design #1

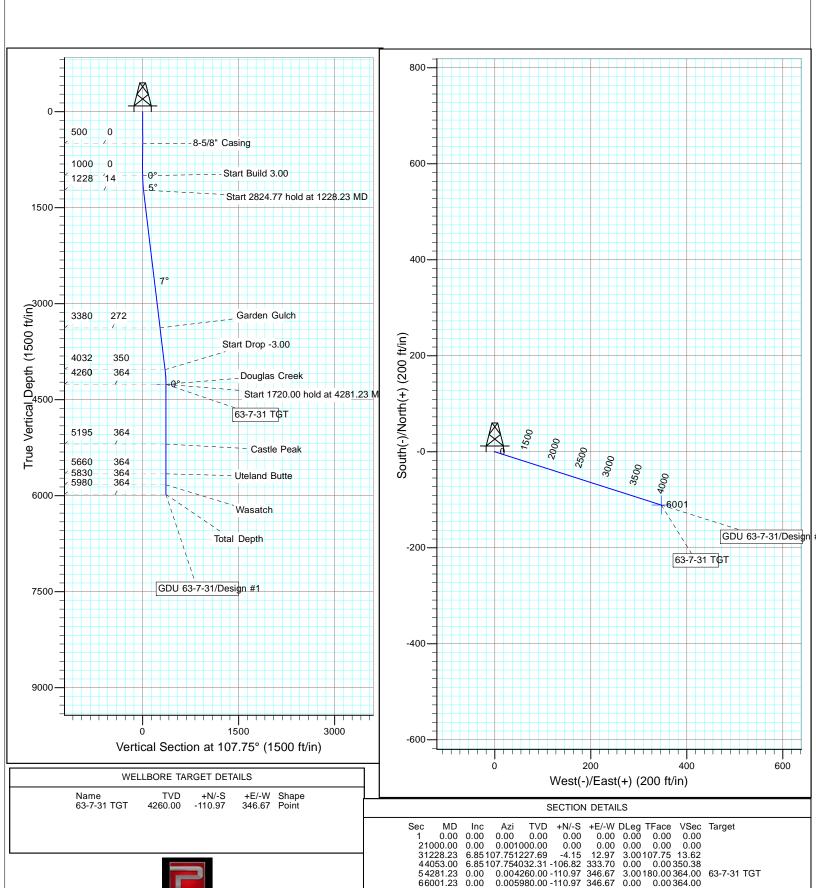


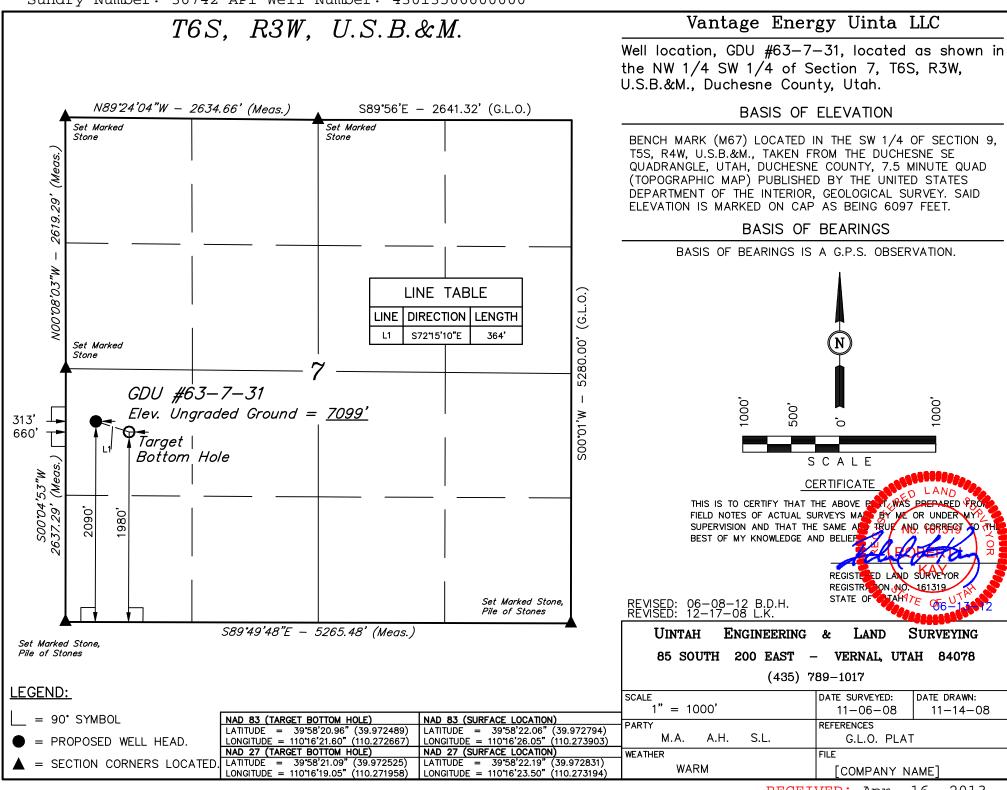
Azimuths to True North Magnetic North: 11.25°

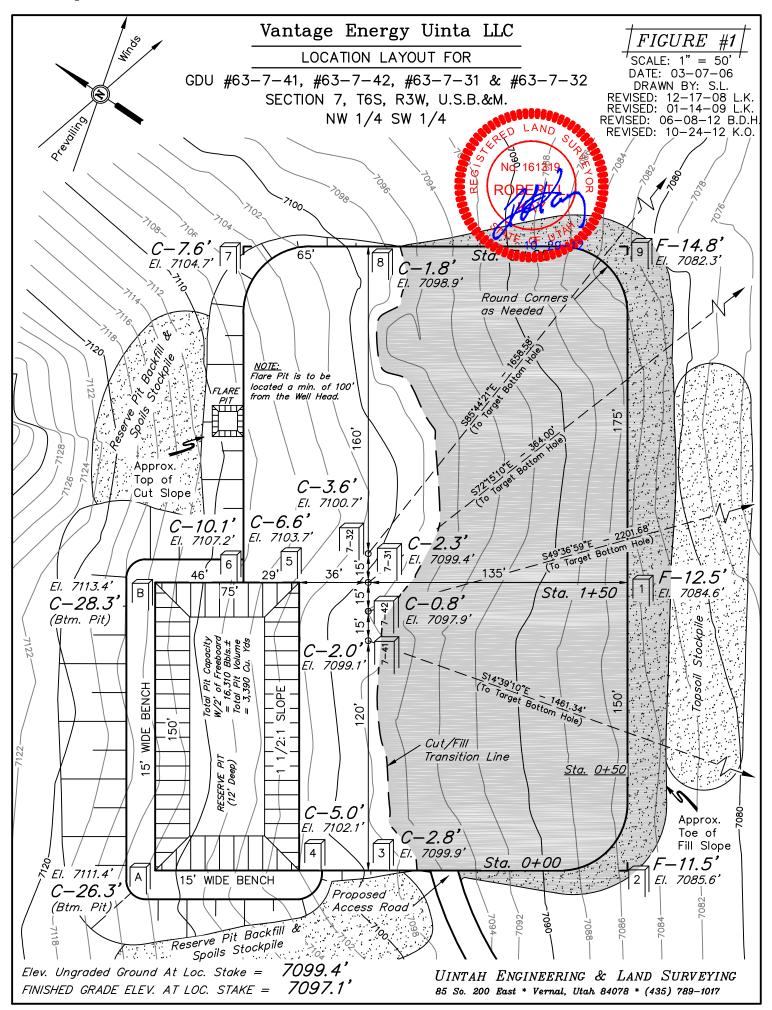
Magnetic Field Strength: 52084.0snT Dip Angle: 65.67° Date: 7/6/2012 Model: IGRF2010

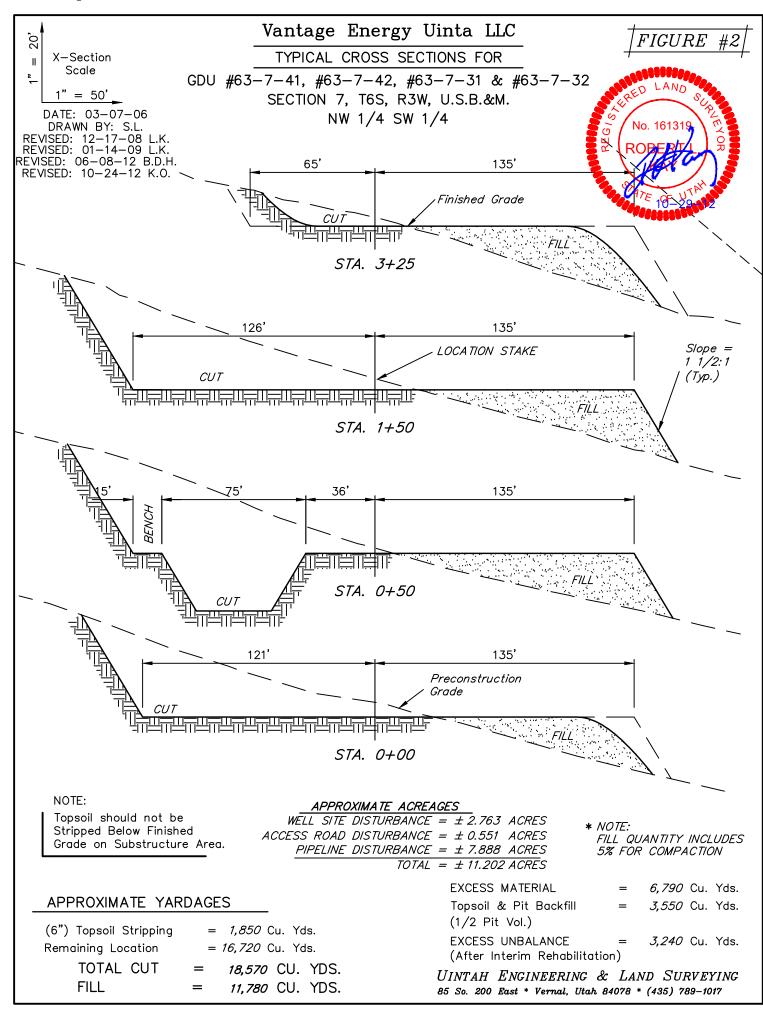
KOP @ 1000'

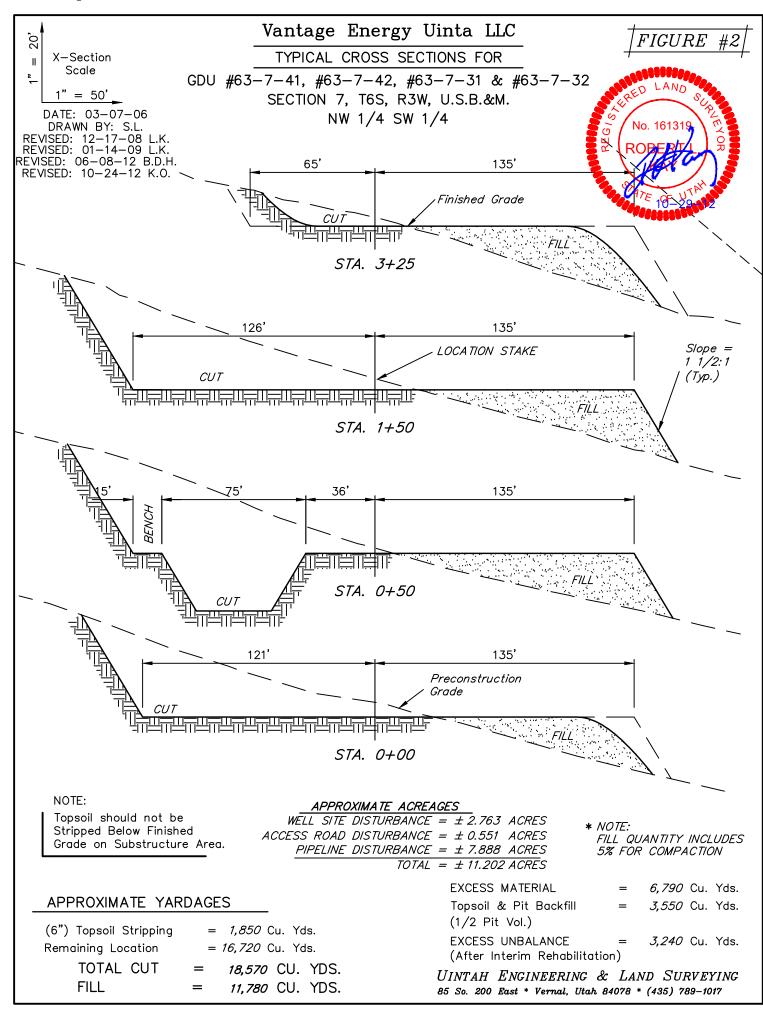
DOGLEG RATE 3 DEG/100

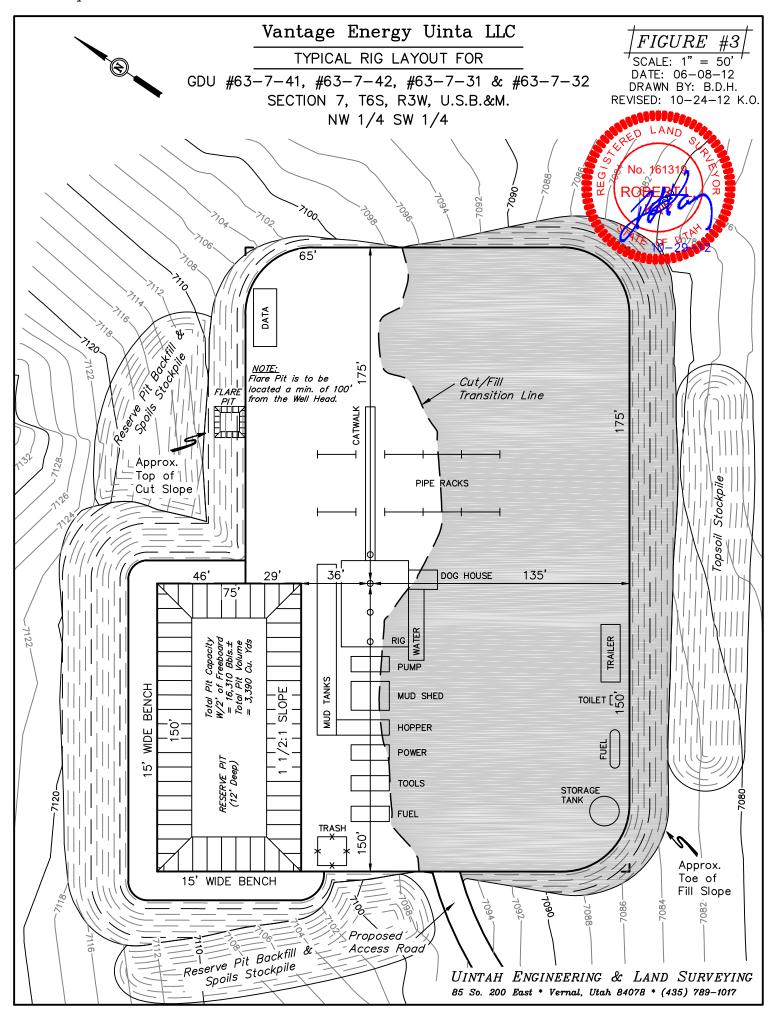


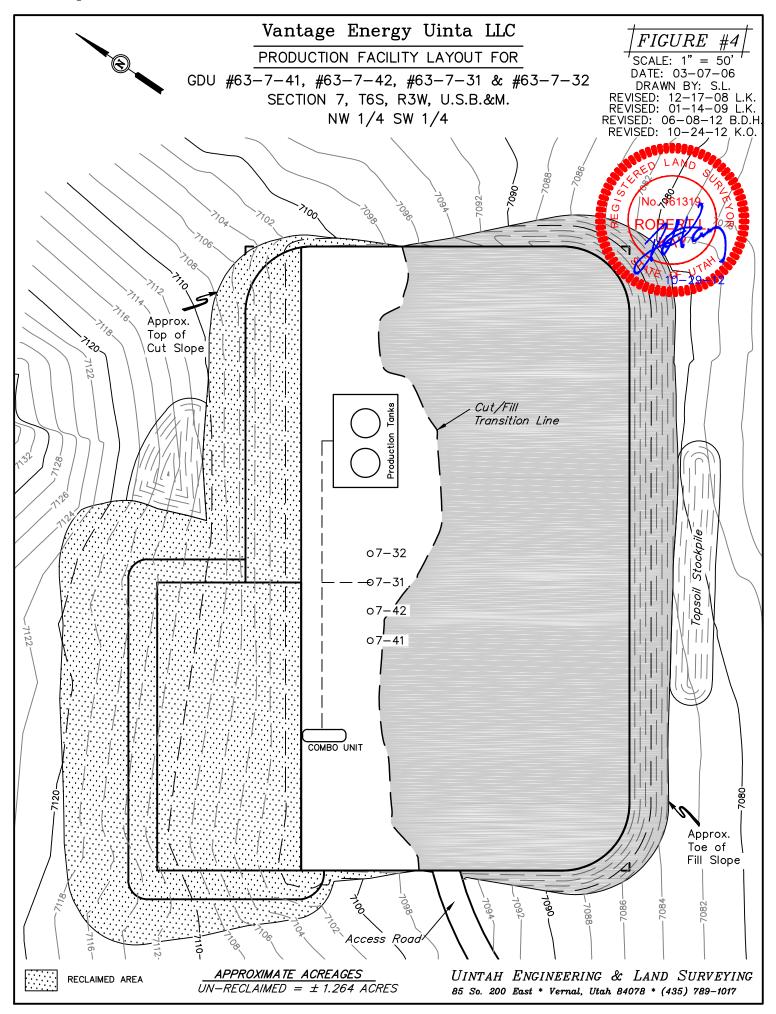


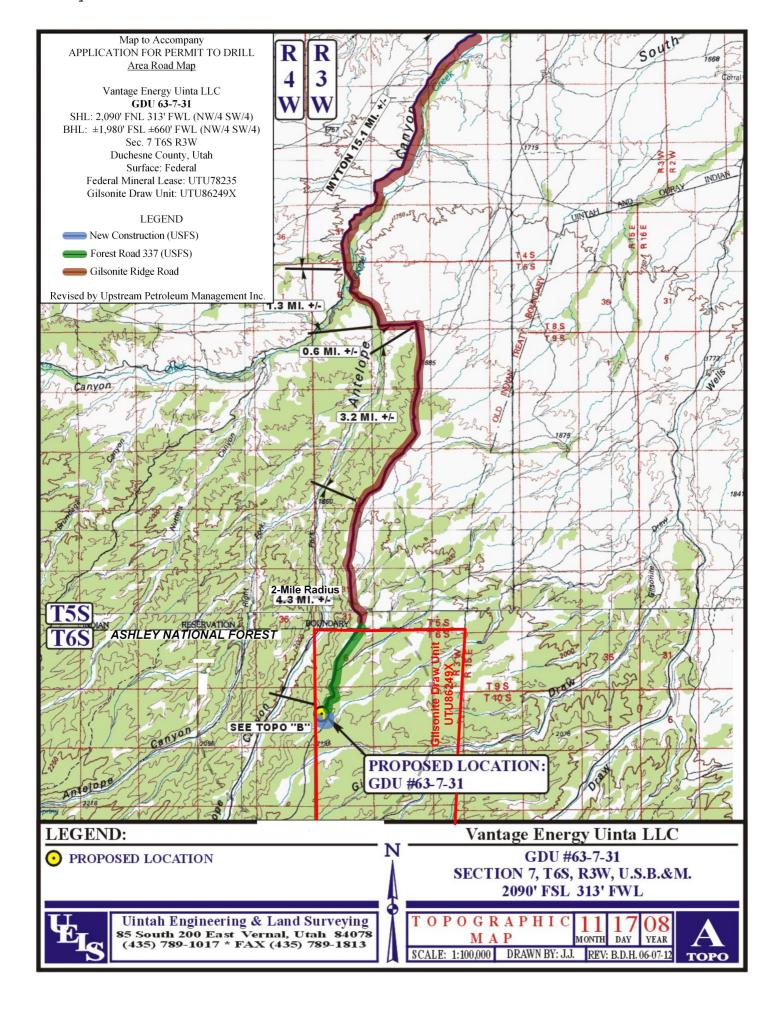


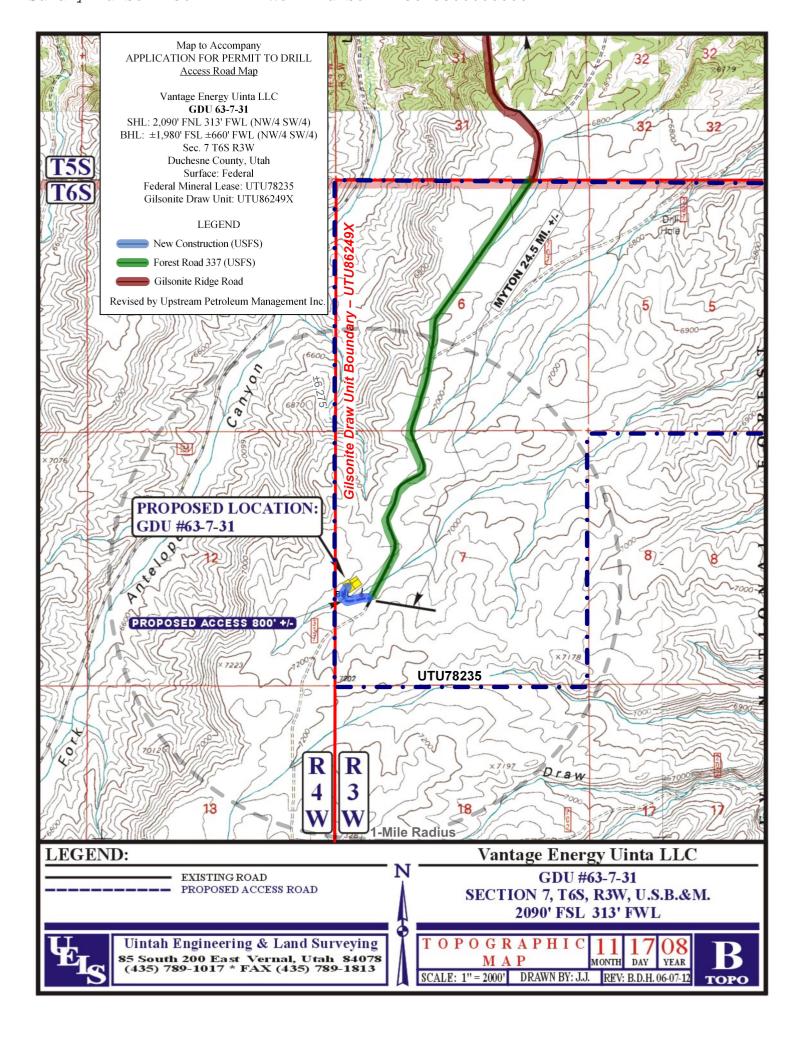














Ms. Diana Mason State of Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114

Re: Directional Drilling R649-3-

11 Vantage Energy Uinta,

LLC GDU 63-7-31

SHL: 2,167' FSL 562' FWL (NW/4 SW/4) BHL: ±1,980' FSL ±660' FWL (NW/4 SW/4)

Sec. 7 T6S R3E

Duchesne County, Utah

Surface: Federal

Mineral: Federal Mineral Lease UTU78235

#### Dear Ms. Mason:

Pursuant to the filing of Vantage Energy Uinta LLC's (Vantage) Application for Permit to Drill regarding the above referenced well on March 25, 2011, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11, pertaining to the Exception of Location and Sitting of Wells.

- GDU 63-7-31 is an exploratory well located within the Gilsonite Draw Federal Unit No. UTU86249X.
- Vantage is permitting this well as stipulated by the United States Forest Service as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Vantage will be better able to utilize any proposed roads and or pipelines in the area.
- Vantage is the unit operator of the Gilsonite Draw Federal Unit. As it pertains to all depths from the surface to the base of the Wasatch Formation, Vantage certifies it is the sole working interest owner within 460 feet of the entire directional well bore and within Section 7 (federal oil and gas lease UTU 78235). As to all depths deeper than the Base of the Wasatch Formation, the sole working interest owner is Exxon Mobil Corporation (XOM). Vantage and XOM have entered into a mutually executed Exploration Agreement that provides for the possible development of those deeper depths.

RECEIVED: Apr. 16, 2013

April 16, 2013

Utah Division Oil, Gas & Mining April 16, 2013

Page 2 of2

Based on the above stated information, Vantage requests the permit be granted pursuant to the terms and conditions of Rule R649-3-11.

Sincerely,

VANTAGE ENERGY UINTA, LLC

Senior Landman

med Held

C.C: mth, jm, dv, tt, kh, su,, Kim Rodell, Andrea Gross (Upstream Petroleum Management)

Form 3160-5 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

AUG 2 0 2014

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

	Expires: July	31,
Lease Ser	rial No.	-,

SUNDRY NOTICES AND REPORTS ON WEL B L M Do not use this form for proposals to drill or to re-ord abandoned well. Use form 3160-3 (APD) for such proposals.

UTU78235

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRI	PLICATE - Other Instruc	erse side.	-	7. If Unit or CA/Agree UTU86249X	ement, Name and/or No.		
1. Type of Well Gas Well Oth	ner			8. Well Name and No. GDU 63-7-31			
2. Name of Operator VANTAGE ENERGY UINTA,	Contact: LLC E-Mail: agross@u			9. API Well No. 43-013-50660			
3a. Address 116 INVERNESS DRIVE EAS ENGLEWOOD, CO 80112	T SUITE 107	3b. Phone No Ph: 303-94	(include area co 2-0506 Ext: 1	de) 03	10. Field and Pool, or Exploratory EXPLORATORY		
4. Location of Well (Footage, Sec., T	, R., M., or Survey Description	)			11. County or Parish, and State		
Sec 7 T6S R3W Mer SLB NW	SW 2090FSL 313FWL				DUCHESNE CO	DUNTY, UT	
12. CHECK APPR	ROPRIATE BOX(ES) TO	) INDICATE	NATURE O	F NOTICE, RI	EPORT, OR OTHE	R DATA	
TYPE OF SUBMISSION			ТҮРЕ	OF ACTION			
Notice of Intent	☐ Acidize	Dee	pen	☐ Product	ion (Start/Resume)	☐ Water Shut-Off	
	☐ Alter Casing	☐ Frac	ture Treat	☐ Reclam	ation	■ Well Integrity	
☐ Subsequent Report	Casing Repair	☐ New	Construction	☐ Recomp	lete	Other	
Final Abandonment Notice	☐ Change Plans	Plug	and Abandon	□ Tempor	arily Abandon		
	Convert to Injection	Plug	Back	☐ Water D	isposal		
following completion of the involved testing has been completed. Final Abdetermined that the site is ready for fill This Sundry Notice is being fill extension of the federal approunderstand that the federal per Please contact the undersigned Thank you.  APD Appr: 7/3/20  APD Exp: 7/3/20  CONDITIO	andonment Notices shall be fil- nal inspection.)  ed on behalf of Vantage is val for the above reference imit will be extended for a ed with any questions.	Energy Uinta Sed well for the a period of two	LLC (Vantage e maximum the o years.	uding reclamation ) to request the me allowable.	We VERNAL F  ENG. ACE  GEOL	FIELD OFFICE	
14. I hereby certify that the foregoing is  Name (Printed/Typed) ANDREA	Electronic Submission # For VANTAGE Committed to AFMSS for	ENERGY UIN	TA, LLC, sent y JOHNETTA I	to the Vernal	•		
					~		
Signature (Electronic S	Submission)		Date 08/21	/2014			
3	THIS SPACE FO	OR FEDERA	L OR STAT	E OFFICE U	SE		
Approved By Conditions of approved any, are seached	d. Approval of this notice does	not warrant or		ands & Min	ield Manager eral Resources	\$6Re 1 7 2014	
certify that the applicant holds legal or equation would entitle the applicant to condu	ct operations thereon.	The state of the s	Office		ELD OFFICE		
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s					ike to any department or	agency of the United	



7000 S. Yosemite St., Suite 2908 Englewood, CO 80112 phone 303.942.0506 www.upstreampm.com

Mr. Mike Stiewig Bureau of Land Management Vernal Field Office 170 South 500 East Vernal, Utah 84078 August 21, 2014

RE:

Sundry Notice: APD Extension Vantage Energy Uinta LLC

GDU 63-7-31

API No. 43-013-50660

SHL: 2,090' FSL 313' FWL (NW/4 SW/4)

BHL:  $\pm 1,980$ ' FSL  $\pm 660$ ' FWL (NW/4 SW/4) within a 60' radius

Sec. 7 T6S R3W

Duchesne County, Utah Federal Lease: UTU78235

Gilsonite Draw Federal Unit: UTU86249X

Dear Mr. Stiewig:

Please find the federal Sundry Notice (SN) Form 3160-5 submitted to the Bureau of Land Management (BLM) via the electronic Well Information System (WIS), on behalf of Vantage Energy Uinta LLC (Vantage). This SN is being submitted to request an extension of the federal permit for the above referenced well for the maximum time allowed.

Please send a copy of all correspondence to Upstream Petroleum Management, Inc. at 7000 S. Yosemite St., Suite 290-B, Englewood, CO 80112. Please contact Andrea Gross or Kimberly Rodell at 303-942-0506 or at agross@upstreampm.com or krodell@upstreampm.com respectively, if you have any questions.

Your early attention to this Sundry Notice is greatly appreciated. Thank you for your assistance.

Sincerely,

Andrea Gross

Permit Agent for Vantage Energy Uinta LLC

KJR:ajg

**Enclosures** 

cc: Vantage Energy Uinta LLC

## **CONDITIONS OF APPROVAL**

# Vantage Energy Uinta, LLC

### Notice of Intent APD Extension

Lease:

UTU-78235

Well:

GDU 63-7-31

Location:

NWSW Sec 7-T6S-R3W

An extension for the referenced APD is granted with the following conditions:

- 1. The extension and APD shall expire on 07/31/2016.
- 2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Robin L Hansen of this office at (435) 781-2777

	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOURC DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU78235		
SUNDF	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	oposals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.		7.UNIT or CA AGREEMENT NAME: GILSONITE DRAW		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: GDU 63-7-31		
2. NAME OF OPERATOR: VANTAGE ENERGY UINTA L	LC		<b>9. API NUMBER:</b> 43013506600000		
3. ADDRESS OF OPERATOR: 116 Inverness Drive East, S	Ste 107 , Englewood , CO, 80112	PHONE NUMBER: 303 386-8600 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2090 FSL 0313 FWL			COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNS	HIP, RANGE, MERIDIAN: 07 Township: 06.0S Range: 03.0W Mer	idian: U	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
7	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
5/15/2015	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION		
Date of Work Completion.	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION		
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:		
12 DESCRIPE PROPOSED OR	COMPLETED OPERATIONS. Clearly show a	all portinent details including dates	dontho volumes etc		
Vantage Energy Uir	nta LLC requests an extension the maximum amount of time	on to the Application for	Approved by the UtphilD20is2016f Oil, Gas and Mining		
			Date:		
			By: Document		
NAME (PLEASE PRINT)	PHONE NUMB	ER TITLE			
Kimberly Rodell	303 941-0506	President			
SIGNATURE N/A		<b>DATE</b> 4/16/2015			



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

#### Request for Permit Extension Validation Well Number 43013506600000

API: 43013506600000 Well Name: GDU 63-7-31

Location: 2090 FSL 0313 FWL QTR NWSW SEC 07 TWNP 060S RNG 030W MER U

Company Permit Issued to: VANTAGE ENERGY UINTA LLC

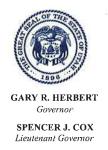
Date Original Permit Issued: 4/21/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

• If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes No
<ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No
nature: Kimberly Rodell Date: 4/17/2015

Sig

Representing: VANTAGE ENERGY UINTA LLC Title: President



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

June 21, 2016

Vantage Energy Uinta LLC. 116 Inverness Drive East, Ste 107 Englewood, CO 80112

Re:

<u>APD Rescinded – GDU 63-7-31, Sec. 7, T. 6S, R. 3W</u>

Duchesne County, Utah API No. 43-013-50660

#### Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on April 21, 2011. On May 7, 2012, April 17, 2013, April 16, 2014 and April 20, 2015 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective June 21, 2016.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

**Environmental Scientist** 

cc: Well File

Bureau of Land Management, Vernal

